

***[Draft] European Sustainability Reporting Standard E4
Biodiversity and Ecosystems***

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Objective

- 1 The objective of this [draft] standard is to set out the Disclosure Requirements related to biodiversity and ecosystems which will enable users of sustainability reporting understand:
 - (a) to what extent the undertaking contributes to the European Green Deal's¹ ambitions for protecting the biodiversity and ecosystems, the EU Biodiversity Strategy for 2030², the SDG 12, 14 and 15³, the Post-2020 Global Biodiversity Framework⁴;
 - (b) to what extent the undertaking contributes to the respect of global environmental limits (e.g. the biosphere integrity & land-system change planetary boundaries⁵);
 - (c) the dependencies and the positive and negative impacts of the undertaking on biodiversity and ecosystems, and its past, current and future measures to protect them;
 - (d) the nature, type and extent of risks and opportunities arising from the undertaking's actions on biodiversity and ecosystems;
 - (e) the biodiversity and ecosystems-related risks, opportunities and dependencies, in relation with the undertaking's activities, and their consequences for the undertaking's financial situation and performance over the short-, medium- and long-term
 - (f) and the plans and capacity of the undertaking to adapt its business model and operations in line with the transition to a sustainable economy and with the preservation and restoration of biodiversity and ecosystems globally.
- 2 This standard derives from the (draft) CSRD stating that the sustainability reporting standards shall specify the information that undertakings are to disclose about environmental factors, including information about 'biodiversity and ecosystems'.
- 3 This standard covers Disclosure Requirements developed primarily from the perspective and for the reporting purpose of non-financial undertakings⁶. However financial undertakings shall apply this standard in relation to their own operations and value chain, it being understood that they are in addition subject to specific regulatory and other sector-specific Disclosure Requirements as their main impacts, risks and opportunities are indirect via their portfolio of financial products and services.
- 4 This standard sets out Disclosure Requirements related to the undertaking's relationship to terrestrial, freshwater and marine habitats, ecosystems and populations of related fauna and flora species, including diversity within species, between species and of ecosystems⁷ and their interrelation with many indigenous and local communities⁸.

¹ The European Green Deal can be found here : https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en

² The EU Biodiversity Strategy for 2030 can be found here : https://ec.europa.eu/environment/strategy/biodiversity-strategy-2030_en

³ SDG 12 pertains to Responsible Consumption and Production, SDG 14 pertains to Life Below Water and SDG 15 to Life on Land. More information can be found here : <https://sdgs.un.org/goals>

⁴ The Post 2020 Global Biodiversity Framework is designed by the Secretariat of the UN Convention on Biological Diversity (CBD) to guide actions worldwide through 2030, to preserve and protect nature and its essential services to people: <https://www.cbd.int/article/draft-1-global-biodiversity-framework>

⁵ A description of the nine planetary boundaries can be found here : <https://www.stockholmresilience.org/research/planetary-boundaries/the-nine-planetary-boundaries.html>

⁶ A non-financial undertaking means an undertaking that is subject to the disclosure obligations laid down in Articles 19a and 29a of Directive 2013/34/EU and is not a financial undertaking, i.e. an asset manager, a credit institution as defined in Article 4(1), point (1), of Regulation (EU) No 575/2013 of the European Parliament and of the Council²², an investment firm as defined in Article 4(1), point (2), of Regulation (EU) No 575/2013, an insurance undertaking as defined in Article 13, point (1), of Directive 2009/138/EC of the European Parliament and of the Council²³, or a reinsurance undertaking as defined in Article 13, point (4) of Directive 2009/138/EC [Disclosures Delegated Act of the (EU) 2020/852 Regulation, commonly referred to as the EU Taxonomy

⁷ See the Convention on Biological Diversity (CBD, 1992). It can be found here: <https://www.cbd.int/convention/text/>

⁸ See also the Kunming Declaration, Declaration from the High Level Segment of the UN Biodiversity, Conference 2020 (Part 1) under the theme: "Ecological Civilization: Building a Shared Future for All Life on Earth"

- 5 'Biological diversity' covers the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part of.

WORKING PAPER

Interactions with other ESRS

- 6 'Biodiversity and ecosystems' is a cross-topic subject as the main drivers of biodiversity loss according to the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) are climate change, pollution, land-use change, natural resource use and exploitation and invasive species⁹.
- 7 So as to provide a comprehensive overview of what is material to biodiversity and ecosystems, all the relevant Disclosure Requirements for the main biodiversity loss drivers arising from other ESRS are listed and referenced in this standard, and in particular to:
- (a) ESRS E1 Climate (mitigation and adaptation);
 - (b) ESRS E2 Pollution;
 - (c) ESRS E3 Water and Marine resources;
 - (d) ESRS E5 Circular Economy.
- 8 The content of this standard related to Strategy and business model, Governance and organisation and Impacts, risks and opportunities, as well as Policies, targets, action plans and resources shall be read in conjunction respectively with cross-cutting standards ESRS 2, ESRS 3, ESRS 4 and ESRS 5.
- 9 This standard covers sector-agnostic Disclosure Requirements. Sector-specific Disclosure Requirements are developed separately and in accordance with the classification following ESRS SEC 1.

Disclosure Requirements

Strategy and business model, Governance and organisation, Impacts, risks and opportunities

- 10 The Disclosure Requirements related to biodiversity and ecosystems and to (i) Strategy and business model, (ii) Governance and organisation, (iii) Impacts, risks and opportunities (iv) policies, actions plans and resources, are defined below.
- 11 The specific biodiversity and ecosystems-related Disclosure Requirements hereafter (Disclosure Requirements 1 to 8) shall be read as complementary to the relevant cross-cutting standards (ESRS 2, ESRS 3, ESRS 4) and they are to be reported upon by the undertaking under the related cross-cutting standards. The information to be covered by Disclosure Requirements 1 to 8 are those that due to their importance to the undertaking are prioritised and monitored directly by the undertaking's highest governing bodies.
- 12 With regards to the biodiversity and ecosystems-related Disclosure Requirements in ESRS 2 Strategy and business model, this topical standard includes two specific Disclosure Requirements. Disclosure Requirement 1 covers Transition plan in line with the targets of no net loss by 2030 and net gain by 2050. Disclosure Requirement 2 covers Resilience of the strategy and business model principal biodiversity and ecosystems-related physical and transition risks.
- 13 With regards to the biodiversity and ecosystems-related Disclosure Requirements in ESRS 3 Governance and organisation, this topical standard includes two specific Disclosure Requirements. Disclosure Requirement 3 covers Internal biodiversity and ecosystems-related pricing schemes and Disclosure Requirement 4 covers Roles and responsibilities of governance bodies.
- 14 With regards to the biodiversity and ecosystems-related Disclosure Requirements in ESRS 4 on Impacts, risks and opportunities, this topical standard includes four specific Disclosure Requirements. Disclosure Requirement 5 covers Identification and assessment processes of biodiversity and ecosystems, Disclosure Requirement 6 covers Material biodiversity and ecosystems dependencies and impact, and material biodiversity loss drivers, Disclosure Requirement 7 covers Processes to identify material biodiversity and ecosystems risks and opportunities and Disclosure Requirement 8 covers Material biodiversity and ecosystems-related physical and transition risks and opportunities.

⁹ Direct drivers of biodiversity loss: <https://ipbes.net/models-drivers-biodiversity-ecosystem-change>

Specific biodiversity and ecosystems-related disclosures for the implementation of ESRS 2 Strategy and business model

[Disclosure Requirement 1] – Transition plan in line with the targets of no net loss by 2030 and net gain by 2050

- 15 The undertaking shall disclose its plans to ensure that its business model and strategy are compatible with the transition to achieve no net loss by 2030 and net gain by 2050¹⁰.

[Disclosure Requirement 2] – Resilience of the Strategy and Business Model to principal biodiversity and ecosystems-related physical and transition risks

- 16 The undertaking shall disclose an assessment of the resilience of the current business model(s) and strategy to biodiversity and ecosystems-related physical and transition risks in light of a range of biodiversity and ecosystems-related scenarios.
- 17 The principle to be followed under this Disclosure Requirement is to provide credibility to the resilience assessment made by the undertaking and an understanding of how the physical and transition risks of biodiversity and ecosystems may impact the undertaking's businesses, strategies and financial performance over time through scenarios analysis. It shall be disclosed in accordance with the Disclosure Requirement 8 under ESRS 2.
- 18 The disclosure required by paragraph 16 shall at least include:
- (a) whether the business model(s) has been verified by using a range of biodiversity and ecosystems-related scenarios;
 - (b) an explanation on the choice of specific scenarios;
 - (c) key assumptions made;
 - (d) the scope of the resilience analysis, particularly the activities – in own operations and the value chain – and related principal transition and physical biodiversity and ecosystems-related risks covered;
 - (e) the time horizon over which the analysis has been conducted;
 - (f) the results of the resilience analysis.
- 19 The disclosure required under paragraph 16 may cover the short-, medium and long-term strategic implications resulting from the scenario analysis as well as the plans to ensure that the value chain strategy is compatible with global and EU objectives on biodiversity and ecosystems.
- 20 The information required under paragraph 19 shall cover:
- (a) how conclusions are drawn from the assessment of biodiversity and ecosystems-related scenarios and an explanation of the processes by which these outputs are validated;
 - (b) how processes for identifying, assessing and managing impacts on biodiversity and ecosystems and on related risks are integrated into the overall risk management, management system and strategy definition;
 - (c) how the undertaking is working with suppliers to manage and mitigate risks for, and negative impacts on biodiversity and ecosystems;
 - (d) the key barriers or challenges to avoiding biodiversity and ecosystems-related risks to the undertaking's own operations, as well as in other parts of its value chain;
 - (e) by reference to Disclosure Requirements 16 and 17 of this standard, an assessment demonstrating how the undertaking's financial position and financial performance

¹⁰ The First Draft of the Post-2020 Global Biodiversity Framework (2021) states "by 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people" and "to take urgent action across society to conserve and sustainably use biodiversity and ensure the fair and equitable sharing of benefits from the use of genetics resources, to put biodiversity on a path to recovery by 2030 for the benefit of planet and people".

supports the resilience of its strategy and business model over the short, medium and long term.

Specific biodiversity and ecosystems-related disclosures for the implementation of ESRS 3 Governance and organisation

[Optional Disclosure Requirement 3] – Internal biodiversity and ecosystems-related pricing schemes

- 21 The undertaking may disclose whether and how internal biodiversity and ecosystems-related pricing schemes are applied to support its decision making.**
- 22 The principle to be followed under this Disclosure Requirement is to provide an understanding of how biodiversity and ecosystems-related dependencies, impacts, risks and opportunities are integrated in an undertaking's strategic and operational decision-making processes through pricing schemes as a lever to support the reduction of pressures on biodiversity and ecosystems.
- 23 The disclosure required by paragraph 21 shall cover:
- (a) a description of whether and how the undertaking applies internal biodiversity and ecosystems-related pricing schemes;
 - (b) the type of pricing scheme implemented;
 - (c) the specific scope of application of the scheme (activities, geographies, entities, etc.);
 - (d) the prices applied according to the type of scheme and critical assumptions;
 - (e) the metrics covered by these schemes.

[Disclosure Requirement 4] – Roles and responsibilities of governance bodies on public policy influence

- 24 The undertaking shall disclose a description of how it engages in activities that could either directly or indirectly influence public policy on biodiversity and ecosystems.**
- 25 The principle to be followed under this Disclosure Requirement is to provide an understanding of how the undertaking has worked with policymakers to develop or advocate for policy changes specifically designed to contribute to biodiversity and ecosystems issues over the reporting period.
- 26 The information required under paragraph 24 shall include inter alia direct engagement with policy makers, trade associations, funding research organisations and a description of the processes the undertaking has in place to ensure that all of its direct and indirect activities seeking to influence policy are consistent with its biodiversity and ecosystems policies and targets.
- 27 The information required under paragraph 24 shall include a description of:
- (a) how it engages with stakeholders regarding biodiversity and ecosystems-related risks, opportunities, dependencies, and impacts, including engagement with upstream and downstream partners, as well as investor engagement, to promote good quality status of biodiversity and ecosystems as well as physical connection (e.g. green corridors) between ecosystems;
 - (b) how it collaborates with biodiversity and ecosystems organisations or experts to understand emerging trends and good biodiversity and ecosystems management practices;
 - (c) how it engages with local and indigenous communities, taking into consideration their perspective and concerns in the organisation's biodiversity and ecosystems management practices;
 - (d) how it is involved in multi-stakeholder initiatives or partnerships aimed at improving the understanding of biodiversity and ecosystems, and/or at addressing dependencies and impacts to biodiversity and ecosystems.

Specific biodiversity and ecosystem-related disclosures for the implementation of ESRS 4 Impacts, Risks and Opportunities

[Disclosure Requirement 5] – Identification and assessment processes of biodiversity and ecosystem services dependencies and impacts

- 28 The undertaking shall disclose how it has identified and assessed material:**
- (a) **biodiversity and ecosystem services dependencies and impacts, including the state of species, genes and ecosystems and;**
 - (b) **drivers of biodiversity loss;**
- by material geographical location of sites and/or by material raw material.**
- 29 The principle to be followed under this Disclosure Requirement is to provide an understanding of the robustness of the process led by the undertaking to identify and assess the materiality of geographical sites locations and raw materials, following the assessment conducted in paragraph 28:**
- (a) **geographical site locations are material:**
 - (i) **given the undertaking's operations or value chain high impacts on biodiversity and ecosystems and/or**
 - (ii) **because the raw materials, natural resources or ecosystem services on which the undertaking depends are disrupted or likely to be disrupted**
 - (b) **raw materials are material:**
 - (i) **given the undertaking's operations or its value chain high impacts or are likely to cause high impacts on those raw materials and their ecosystems, and/or**
 - (ii) **because the raw materials production or their related ecosystem services on which the undertaking depends are disrupted or likely to be disrupted.**
- 30 The disclosure required by paragraph 28 shall cover:**
- (a) **how the undertaking has identified and assessed the state of biodiversity and ecosystems that are impacted or on which it depends upon by material geographical sites and/or by material raw material;**
 - (b) **how the undertaking has identified and assessed the material biodiversity loss drivers by upon by material geographical sites and/or by material raw material;**
 - (c) **the process for identifying and assessing the dependencies and impacts on the state of biodiversity and ecosystem services and / or raw material including:**
 - (i) **a description of how the context of biodiversity and ecosystem services related dependencies and impacts are taken into account (including geographical location, time frame, scope of assessment, severity of impact or significance of the loss of functionality, tools and methodologies used);**
 - (ii) **a description of how the process covers the undertaking's own operations as well as the rest of its value chain (supply chain, products and services, business partners).**
- 31 The undertaking may disclose corporate-wide or value-chain-wide aggregated results on material impacts and dependencies.**

[Disclosure Requirement 6] - Material biodiversity and ecosystems dependencies and impacts, and material biodiversity loss drivers

- 32 The undertaking shall disclose its material dependencies and impacts by categories and its material biodiversity loss drivers by geographical location of sites, and/or by raw material, within its operations and along its value chain.**
- 33 The disclosure required by paragraph 32 shall cover:**

- (a) the nature of material dependencies on natural resources and ecosystem services in own operations by material geographical site location;
 - (b) the nature of material direct and indirect impacts on biodiversity and ecosystems in own operations by material geographical site location;
 - (c) its material biodiversity loss drivers ecosystems in own operations by material geographical site location;
 - (d) a description of the undertaking's knowledge of its suppliers' material biodiversity and ecosystems services-related dependencies, impacts and material biodiversity loss drivers, by material geographical location.
- 34 The disclosure required by paragraph 32, if disclosed by raw material, shall cover:
- (a) the nature of material dependencies on natural resources and ecosystem services in own operations by material raw material produced, sourced or consumed;
 - (b) the nature of material direct and indirect impacts on biodiversity and ecosystems in own operations by material raw material produced, sourced or consumed;
 - (c) the nature of material biodiversity loss drivers in own operations by material raw material produced, sourced or consumed;
 - (d) a description of the undertaking's knowledge of its suppliers' biodiversity and ecosystems services-related dependencies, impacts and material biodiversity loss drivers, by material raw material sourced.
- 35 This Disclosure Requirement supports the information needs of financial market participants subject to the Sustainable Finance Disclosure Regulation (EU) 2019/2088 (SFDR).

[Disclosure Requirement 7] – Processes to identify material biodiversity and ecosystems risks and opportunities

- 36 The undertaking shall disclose its processes to identify and assess its:
- (a) **short-, medium- and long-term biodiversity and ecosystems-related physical risks and opportunities, in its operations and along the value chain;**
 - (b) **short-, medium- and long-term biodiversity and ecosystems transition risks and opportunities, including policy, legal, technology, and market risks and opportunities, in its operations and along the value chain.**
- 37 The disclosure required by paragraph 36 shall cover:
- (a) a description of the processes to identify those physical and transition risks and opportunities that due to their importance for the undertaking are prioritised and monitored directly by the undertaking's highest governing bodies, including a definition of the considered time horizons, scenario analysis, how size and scale of the risks and opportunities are assessed;
 - (b) a description of the processes to select material transition and physical risks and opportunities;
 - (c) a description of how the process covers the undertaking's own operations as well as the rest of its value chain (supply chain, products and services, business partners).
- 38 The undertaking may consider systemic risks within their assessment of biodiversity and ecosystems-related risks, referred to as the risk that a critical natural system no longer functions properly, the risk to financial institutions' portfolios and a risk to system-wide financial stability. In this case, a description of the processes to identify those risks is warranted.

[Disclosure Requirement 8] - Material biodiversity and ecosystems-related physical and transition risks and opportunities

- 39 The undertaking shall disclose its principal biodiversity and ecosystems-related risks and opportunities by categories within its operations and along its value chain.

- 40 The principle to be followed under this Disclosure Requirement is to provide an understanding of what risks and opportunities are associated with biodiversity and ecosystems.
- 41 The disclosure required by paragraph 39 shall cover:
- (a) physical risks, transition risks (regulatory, market, financial), other risks including reputational, financing and supply chain;
 - (b) the undertaking's principal biodiversity and ecosystems opportunities by categories within the operations and along the value chain: transition opportunities (regulatory, market, financial), other opportunities including reputational, financing and supply chain.
- 42 The undertaking may consider the disclosure of systemic risks identified.

Policies, Targets, Action Plans and Resources

- 43 The specific biodiversity and ecosystems-related Disclosure Requirements 9 to 11 developed hereafter refer to ESRS 5 Definitions for policies, targets, action plans and resources and shall be read as complementary to the respective cross-cutting standard (ESRS 5).

[Disclosure Requirement 9] – Policies implemented to manage biodiversity and ecosystems

- 44 The undertaking shall disclose separately its policies regarding:
- (a) **biodiversity and ecosystems;**
 - (b) **the sustainable production, consumption and sourcing of raw materials;**
 - (c) **screening and engaging with suppliers on biodiversity and ecosystems;**
 - (d) **the social consequences of biodiversity and ecosystems related dependencies and impacts.**
- 45 The disclosure required by paragraph 44 on policies regarding biodiversity and ecosystems shall provide information on how the policy allows to:
- (a) avoid its negative impacts on biodiversity and ecosystems in its operations and throughout the value chain;
 - (b) minimise its negative impacts on biodiversity and ecosystems in its operations and throughout the value chain that cannot be avoided;
 - (c) rehabilitate degraded ecosystems or restore cleared ecosystems following exposure to impacts that cannot be completely avoided and/or minimised;
 - (d) mitigate material biodiversity loss drivers as disclosed in the section dependencies, impacts, risks and opportunities;
 - (e) monitor and manage its physical and transition risks and opportunities.
- 46 The disclosure required by paragraph 44 on policies regarding the sustainable production, consumption and sourcing of raw materials shall provide information on how the policy allows to:
- (a) produce, source or consume with or from third-party certification;
 - (b) ensure traceability of production, sourcing or consumption of raw materials;
 - (c) produce, source or consume from ecosystems that have been managed to maintain or enhance conditions for biodiversity, as demonstrated by regular monitoring and reporting of biodiversity levels and gains or losses.
- 47 The disclosure required by paragraph 44 on policies regarding the social consequences of biodiversity and ecosystems related dependencies and impacts shall provide information on how the policy in relation to:
- (a) the fair and equitable benefit-sharing from the benefits arising from the utilisation of genetic resources;

- (b) the prior informed consent for access to genetic resources;
 - (c) the prior informed consent or approval and involvement (of the communities) for access to traditional knowledge associated with genetic resources that is held by indigenous and local communities;
 - (d) the protection of the rights of local and indigenous communities; notably recognising the close and traditional dependence of many indigenous and local communities embodying traditional lifestyles on biological resources, and the desirability of sharing equitably benefits arising from the use of traditional knowledge, innovations and practices relevant to the conservation of biological diversity and the sustainable use of its components.
- 48 This Disclosure Requirement supports the information needs of financial market participants subject to the Sustainable Finance Disclosure Regulation (EU) 2019/2088 (SFDR).

[Disclosure Requirement 10] – Measurable targets for biodiversity and ecosystems

- 49 **The undertaking shall disclose its adopted, measurable, outcome-oriented biodiversity and ecosystem-related targets.**
- 50 The principle to be followed under this Disclosure Requirement is to provide an understanding of the biodiversity and ecosystems loss mitigation, minimisation and rehabilitation or restoration actions that the undertaking intends to achieve in the future and their effectiveness in ensuring compatibility with no net loss in 2030, and full nature recovery by 2050.
- 51 The disclosure required by paragraph 49 may include targets related to
- (a) material impacts on biodiversity and ecosystems;
 - (b) material dependencies on biodiversity and ecosystems;
 - (c) material biodiversity loss impact drivers;
 - (d) material physical or transition risks.
- 52 The disclosure required by paragraph 51 (a) may include targets related to:
- (a) avoidance of biodiversity loss;
 - (b) minimisation of biodiversity loss or;
 - (c) rehabilitation or restoration of biodiversity loss.
- 53 The disclosure required by paragraph 51 (a) and (b) may include targets related specifically to sustainable sourcing and consumption of raw materials such as targets related to:
- (a) avoidance of production, sourcing or consumption of raw materials of concern or at risk of extinction
 - (b) minimisation of production, sourcing or consumption of raw materials of concern or at risk of extinction
 - (c) absolute demand reduction for raw materials of concern or at risk of extinction
 - (d) increasing certified sustainable production and/or procurement of raw materials of concern or at risk of extinction (per third party certification schemes for reported biodiversity-risk commodities, % of total production/ consumption certified);
 - (e) increasing non-certified sustainable production and/or procurement of raw materials of concern or at risk of extinction (other than with a third-party certification scheme).
- 54 The targets disclosed under paragraph 49 shall include where applicable:
- (a) an explanation of what each target intends to achieve (e.g., land change reduction, full nature restoration, physical or transition risk mitigation, increase of CapEx or others) and how it is embedded in the undertaking's biodiversity and ecosystems-related policies;
 - (b) the topical perimeter of the target: species specific, ecosystem specific;

- (c) whether the target is short-, medium- or long-term, where short-term relates to 1-5 years from the baseline year, medium-term to 5-10 years and long-term to 10 years and more, but no later than 2050;
 - (d) a presentation preferably in 5-years periods including set dates in 2030, detailing the scope covered in absolute and/or intensity values;
 - (e) how the targets respect ecological thresholds (e.g. the biosphere integrity & land-system change planetary boundaries¹¹) and allocate responsibility for respecting these thresholds to the organizational level;
 - (f) whether the targets are informed by expectations in authoritative intergovernmental instruments such as the Convention for Biological Diversity (CBD) and, where relevant, by scientific consensus, that is, in the case of biodiversity and ecosystem services, the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES);
 - (g) whether targets are mandatory (based on legislation) or voluntary. If they are mandatory, the undertaking shall list the relevant legislation;
- 55 The undertaking shall state how its targets disclosed under paragraph 47 are connected with:
- (a) the EU Biodiversity Strategy for 2030, the EU Habitats directive;
 - (b) national policy frameworks in relation to ecosystems and biodiversity.
- 56 The undertaking may state how its targets disclosed under paragraph 47 are connected with:
- (a) the SDGs 12, 14 and 15;
 - (b) the Post-2020 Global Biodiversity framework;
 - (c) any global convention related to biodiversity and ecosystems.
- 57 The undertaking may include other biodiversity and ecosystems-related targets the undertaking has adopted, such as targets related to safeguarding of ecosystem services, to provide an understanding of how the undertaking manages physical risks resulting from biodiversity or ecosystems loss or degradation and reduces its vulnerability to these risks.

[Disclosure Requirement 11] – Biodiversity and ecosystems action plans

- 58 **The undertaking shall describe its actions and actions plans and allocation of resources to meet its policy objectives and targets.**
- 59 The principle to be followed under this Disclosure Requirement is to provide an understanding of (i) the stand-alone actions and action plans comprising closely interrelated management measures being undertaken in the framework of the biodiversity and ecosystems-related policies and (ii) the related allocation of resources, and to understand how stand-alone actions and action plans are related to biodiversity and ecosystems-related targets.
- 60 The disclosure required by paragraph 58 shall cover action plans and resources related to own operations and value chain.
- 61 The undertaking shall describe how it has incorporated traditional knowledge into biodiversity and ecosystems-related actions and actions plans.
- 62 For each action plan or stand-alone action, the undertaking shall include the description of:
- (a) the geographical scope of the actions, including explanation of any limitations as to geographical boundaries or activities;

¹¹ A description of the nine planetary boundaries can be found here : <https://www.stockholmresilience.org/research/planetary-boundaries/the-nine-planetary-boundaries.html>

- (b) a list of the stakeholders involved in the stand-alone action or action plan and how they are involved, or/and a list of stakeholders impacted negatively or positively by the stand-alone action or action plan and how they are impacted;
 - (c) actions categorised according to the mitigation strategy: avoid (conserve), minimize, restore/rehabilitate;
 - (d) the material impact driver(s) each action or action plan aims to tackle;
 - (e) related impacts or benefits created for local communities, smallholders, indigenous groups, women, the poor, marginalised and vulnerable groups and individuals;
 - (f) an elaboration of the reason(s) why it selected such action over other possible actions;
 - (g) an explanation whether the action is intended to be a one-time initiative or a systematic practice;
 - (h) an explanation of changes in the action plan;
 - (i) a brief assessment whether key actions may induce significant adverse sustainability impacts;
 - (j) further explanations deemed useful to understand key actions;
 - (k) if the action is individual or collective: for a collective action, the undertaking shall explain its role;
 - (l) whether the success of the action depends on the undertaking of similar or supporting actions by other undertakings, and to what degree.
- 63 The undertaking may describe the actions or actions plans to contribute to system-wide change, notably to alter the drivers of nature loss, e.g. through technological, economic, institutional, and social factors and changes in underlying values and behaviours¹².

Performance Measurement

- 64 Performance measures on Biodiversity and ecosystems have not reached a global consensus yet and the object of many ongoing collective work at the time of the drafting of this standard. That is why the Disclosure Requirements proposed in this [Draft] standard are mostly principles-based, so as to clarify the categories of performance measures expected, as well as laying out the features of quality biodiversity and ecosystems-related measures rather than proposing specific measures per say. Wherever possible, the application guidance refers to examples of commonly used metrics and tools in the public domain to allow application of the different categories of measures required under this Disclosure Requirement.
- 65 In this particular context, the undertaking shall consider and provide information on the following when disclosing information on biodiversity and ecosystems metrics under Disclosure Requirements 12 to 15:
- (a) methodologies and metrics used and explanation for why these methodologies and metrics are selected, as well as their assumptions, limitations and uncertainties, as well as any changes in methodologies made over time and why they occurred;
 - (b) the scope of the metric:
 - (i) undertaking, site, brand, commodity, corporate business unit, activity;
 - (ii) entire value chain, upstream, downstream value chain or own operations and leased assets;
 - (c) the biodiversity components of the metric: species specific, ecosystem specific;
 - (d) a description of the geographies covered by the methodology and, if applicable, an explanation of why the relevant geographies identified were not included;

¹² The system-wide approach in paragraph 72 refers to the Taskforce for Nature Financial related Disclosures (TNFD) Proposed Technical Scope from June 2021 and the Science-Based Targets for Nature (SBTN) Initial Guidance for Business from September 2020.

- (e) how the metrics allow for the respect of ecological thresholds (e.g. the biosphere integrity & land-system change planetary boundaries¹³);
 - (f) the frequency of monitoring, key indicators being monitored, and the baseline condition/value and baseline year/period, as well as the reference period;
 - (g) whether the parametrisation of these metrics rely on primary data, secondary data, modelled data or on expert judgement, or a mixture of these;
 - (h) whether metrics are mandatory (based on legislation) or voluntary. If they are mandatory, the undertaking shall list the relevant legislation; if voluntary, refer to the voluntary standard/procedure used;
 - (i) whether the metrics are informed by or correspond to expectations or recommendations of relevant and authoritative national, EU-level or intergovernmental guidelines, policies, legislation or agreements, such as the Convention for Biological Diversity (CBD) and, where relevant, by scientific consensus, that is, in the case of biodiversity and ecosystem services, the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES).
- 66 Metrics chosen shall be responsive to actions, and give an appraisal of the undertaking's impacts and dependencies on biodiversity and ecosystems, which is accurate as feasible.
- 67 If the undertaking has not adopted any metrics meeting the above criteria, it shall disclose:
- (a) whether such metrics will be adopted and when; or
 - (b) reasons why the reporting entity does not plan to adopt such metrics; and/or
 - (c) whether the undertaking measures progress without a specific metric, and if so how and what progress has been achieved in terms of the outcomes related to risks, opportunities and impacts underpinning the materiality of the topic.
- 68 The undertaking shall indicate which actions are measured and monitored via the metrics how they relate to targets achievement.
- 69 The undertaking shall disclose metrics according to the Pressures, State, Impact, Responses Framework.

[Disclosure Requirement 12] – Pressure metrics

- 70 The undertaking shall report pressure metrics.**
- 71 The principle to be followed under this Disclosure Requirement is to provide information on material impact drivers that unequivocally influence biodiversity, ecosystem services and underlying ecosystems.
- 72 The information required under paragraph 68 shall cover pressure metrics that pertain to material impact drivers that unequivocally influence biodiversity, ecosystem services and underlying ecosystems. It shall include, but not be limited to, land-use or habitat change, climate change, pollution, natural resource use and exploitation, as well as invasive species.
- 73 If land-use or habitat change has been assessed by the undertaking as a material impact driver of biodiversity and ecosystem services loss, the undertaking shall report pressure metrics that pertain to land-use or habitat change. Land-use or habitat change can include the conversion of land cover (e.g., deforestation or mining), changes in the management of the ecosystem or agro-ecosystem (e.g., through the intensification of agricultural management or forest harvesting) or changes in the spatial configuration of the landscape (e.g., fragmentation of habitats, changes in ecosystem connectivity).
- 74 In relation to paragraph 73, the undertaking shall disclose its share of non-vegetated surface area (surfaces that have not been vegetated in ground, as well as on roofs, terraces and walls) compared to the total surface area of the plots of all assets. This Disclosure

¹³ A description of the nine planetary boundaries can be found here : <https://www.stockholmresilience.org/research/planetary-boundaries/the-nine-planetary-boundaries.html>

Requirement supports the information needs of financial market participants subject to the Sustainable Finance Disclosure Regulation (EU) 2019/2088 (SFDR).

- 75 If climate change has been assessed by the undertaking as a material impact driver of biodiversity and ecosystem services loss, the undertaking shall report pressure metrics that pertain to climate change, as laid out in ESRS E1.
- 76 If pollution has been assessed by the undertaking as a material impact driver of biodiversity and ecosystem services loss, the undertaking shall report pressure that pertain to pollution, as laid out in ESRS E2, but not limited to sources of pollution covered in ESRS E2.
- 77 If natural resource use and exploitation has been assessed by the undertaking as a material impact driver of biodiversity and ecosystem services loss, the undertaking shall report pressure metrics that pertain to natural resource use and exploitation as laid out in ESRS E3 for water use and ESRS E5 for natural resources use, but not limited to natural resources covered in ESRS E3 and E5.
- 78 If invasive species has been assessed by the undertaking as a material impact driver of biodiversity and ecosystem services loss, the undertaking shall report pressure metrics that pertain to invasive species control and eradication.
- 79 If the undertaking has identified any other material impact drivers of biodiversity and ecosystem services loss (in accordance with section Dependencies, Impacts, Risks and Opportunities), the undertaking shall report pressure metrics that pertain to those particular additional material impact drivers.

[Disclosure Requirement 13] – Impact metrics

- 80 **The undertaking shall report impact metrics for material geographical locations of sites and/or material raw materials.**
- 81 The information required under paragraph 80 shall include the assessment and reporting on the impact of their operations (owned, leased) and the impact of their value chain on species, ecosystems and ecosystem services and in particular:
- (a) when reporting on their impact on species, the undertaking shall consider three aspects – population size distinctiveness and extinction risk. These aspects provide insight on the health of a single species' population and its relative resilience to human induced and naturally occurring change;
 - (b) when reporting on their impact on ecosystems, the undertaking shall consider four aspects: condition, extent, distinctiveness and functioning. Together they give insight into the overall health of an ecosystem.

[Disclosure Requirement 14] – Response metrics

- 82 **The undertaking shall disclose metrics related to how it minimizes and rehabilitates or restores material impacts on biodiversity and ecosystems in material geographical locations of sites and/or material raw materials identified.**

[Optional Disclosure Requirement 15] – Sustainable consumption and production metrics

- 83 **The undertaking may disclose metrics on its sustainable consumption and production.**
- 84 The disclosure required by paragraph 83 shall include:
- (a) the list of any third-party certification schemes that it uses for its raw material, as well as the volume and percentage of its production and/or consumption covered;
 - (b) the volume and percentage of supply of raw material traceable to mill or to plantation level;

- (c) the volume and percentage of raw material that comes from ecosystems that have been managed to maintain or enhance conditions for biodiversity, as demonstrated by regular monitoring and reporting of biodiversity levels and gains or losses.

[Taxonomy Regulation for biodiversity and ecosystems]

- 85 The undertaking shall disclose information required by Article 8 of the Regulation (EU) 2020/852 (Taxonomy Regulation) in conjunction with the Commission Delegated Regulation (EU) 2021/2178 of 6 July 2021 and in conjunction with upcoming technical screening criteria for determining the conditions under which an economic activity qualifies as contributing substantially to the sustainable use and protection of biodiversity and ecosystems.
- 86 The Taxonomy Regulation in its Article 8(2) requires undertakings to disclose information on the proportion of the turnover, capital expenditure ('CapEx') and operating expenditure ('OpEx') associated with economic activities that qualify as environmentally sustainable.
- 87 The information to be disclosed under the upcoming biodiversity and ecosystems-related provisions of the Taxonomy regulation shall be complementary to the information disclosed under the provisions of this standard as it provides an understanding of the undertaking's own substantial contribution in favour of the sustainable use and protection of biodiversity and ecosystems.

[Disclosure Requirement 16] – Financial exposure to physical risks

- 88 **The undertaking shall disclose its financial exposure to physical risks.**
- 89 The principle to be followed under this Disclosure Requirement is to provide an understanding of how principal biodiversity and ecosystems-related physical risks may affect the undertaking's financial position, performance and development over the short, medium and long term, considering that those potential future financial effects of biodiversity and ecosystems physical risks may not meet at the reporting date the recognition criteria set for financial statements.
- 90 The disclosure required by paragraph 88 shall provide information on how its principal biodiversity and ecosystems-related physical risks may affect its future performance, position and development in terms of:
 - (a) amounts (monetary unit) of assets exposed to physical risks;
 - (b) share (%) of turnover from its business activities exposed to physical risks.
- 91 The undertaking shall disclose a reconciliation of these assets and share of turnover to the most relevant amounts presented in the financial statements.

[Disclosure Requirement 17] – Financial exposure to transition risks

- 92 **The undertaking shall disclose its financial exposure to transition risks.**
- 93 The principle to be followed under this Disclosure Requirement is to provide an understanding of how principal biodiversity and ecosystems-related transition risks may affect the undertaking's financial position, performance and development over the short, medium and long term, considering that those potential future financial effects of biodiversity and ecosystems-related transition risks may not meet at the reporting date the recognition criteria set for financial statements.
- 94 The disclosure required by paragraph 92 shall provide information on how its principal biodiversity and ecosystems-related transition risks may affect its:
 - (a) future financial position in terms of:
 - (i) assets (monetary unit) exposed to transition risks over the short, medium, and long-term;
 - (ii) liabilities (monetary unit) that may have to be recognised over the short, medium, and long-term;

- (b) future financial performance in terms of share (%) of turnover from its business activities exposed to transition risks.
- 95 The undertaking shall disclose a reconciliation of these assets and turnover to the most relevant amount presented in the financial statements.

[Optional Disclosure Requirement 18] – Financial opportunities related to biodiversity and ecosystems other than the Taxonomy Regulation

- 96 **The undertaking may disclose its financial opportunities that relate to biodiversity and ecosystems and that complement the Taxonomy Regulation related ones.**
- 97 The principle to be followed under this Disclosure Requirement is to provide information allowing for an overall understanding of the financial opportunities related to biodiversity and ecosystems, complementing the information requested under the Taxonomy Regulation.
- 98 If the undertaking discloses the information according to paragraph 95, it shall include an assessment of the market size for low biodiversity and ecosystems impact products and services over the short-, medium-, and long-term, explaining how these are defined, how financial amounts are estimated, and which critical assumptions are made.

[Optional Disclosure Requirement 19] – Financing biodiversity and ecosystems mitigation projects outside of the undertaking's value chain

- 99 **The undertaking may disclose the financing of biodiversity and ecosystems mitigation projects outside its value chain.**
- 100 The principle to be followed under this optional Disclosure Requirement is to provide an understanding of the extent and quality of the funding of projects that avoid, reduce or remove biodiversity loss outside the undertaking's value chain (also commonly referred to as biodiversity offsets).
- 101 The information disclosed under paragraph 99 shall include:
- (a) the total purchased biodiversity offsets;
 - (b) the total sold biodiversity offsets;
 - (c) a description of the type of offsets including the quality criteria applied and the standards that the biodiversity offsets fulfil.

Application provisions

- 102 In order to ease the first-time application of this standard, the application of the following aspects of the two Disclosure Requirements listed below may be deferred by one year:
- (a) Disclosure Requirement 16 on Financial exposure to physical risks, the undertaking may elect not to apply this Disclosure Requirement
 - (b) Disclosure Requirement 17 on Financial exposure to transition risks: the undertaking may elect not to apply this Disclosure Requirement
- 103 The undertaking shall indicate if the deferral.

Appendix A: Defined terms

This appendix is integral part of the [draft] ESRS E4.

Access and benefit-sharing	Access and benefit-sharing (ABS) refers to the way in which genetic resources may be accessed, and how the benefits that result from their use are shared between the people or countries using the resources (users) and the people or countries that provide them (providers). (CBD, 2010)
Agro-ecosystems	Agroecosystems, are defined as communities of plants and animals interacting with their physical and chemical environments that have been modified by people to produce food, fibre, fuel and other products for human consumption and processing (Maes, 2018 cited by https://biodiversity.europa.eu/ecosystems/agroecosystems).
Allocations of responsibility	Whenever an organisation uses a shared resource or is part responsible for preserving or producing one, a further step is required to establish a fair allocation of the responsibilities involved. This becomes an organisation-specific threshold through a process called translation. The most appropriate method of allocation varies by sustainability topic. For example, climate change involves apportioning shares of the responsibility to achieve an overall global carbon reduction target to individual emitters, whereas water use involves calculating the water availability in a watershed and fulfilling the needs of others (human and non-human) before assigning limits to individual organisations. (https://impactmanagementplatform.org/thresholds-and-allocations/)
Avoidance	Measures taken to prevent impacts from occurring in the first place, for instance by changing or adjusting the development project's location and/or the scope, nature and timing of its activities (Conway, M., Rayment, M., White, A., and Berman, S. (2013) Exploring Potential Demand for and Supply of Habitat Banking in the EU and Appropriate Design Elements for a Habitat Banking Scheme. Final Report submitted to DG Environment, ICF GHK, London)
Biodiversity	The variability among living organisms from all sources including terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part. This includes variation in genetic, phenotypic, phylogenetic, and functional attributes, as well as changes in abundance and distribution over time and space within and among species, biological communities and ecosystems. (IPBES online glossary)
(Biosphere or ecological) integrity	Integrity refers to an unimpaired condition, a state of being complete or undivided. Biological integrity has been defined as '[t]he ability to support and maintain a balanced, integrated adaptive assemblage of organisms having species composition, diversity, and functional organization comparable to that of natural habitat of the region. (Karr and Dudley 1981, Karr et al. 1986)
Biodiversity loss	The reduction of any aspect of biological diversity (i.e. diversity at the genetic, species and ecosystem levels) is lost in a particular area through death (including extinction), destruction or manual removal; it can refer to many scales, from global extinctions to

	population extinctions, resulting in decreased total diversity at the same scale. (IPBES online glossary)
Biodiversity offsetting	Measures taken to compensate for any residual significant, adverse impacts that cannot be avoided, minimized and/or rehabilitated or restored, in order to achieve no net loss or a net gain of biodiversity. Offsets can take the form of positive management interventions such as restoration of degraded habitat, arrested degradation or averted risk, protecting areas where there is imminent or projected loss of biodiversity. (CDP, BBOP, 2012)
Biological diversity	The variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part: this includes diversity within species, between species and of ecosystems. (CBD, 1992)
(Third-Party) Certification	The action or process of providing a product with an official document attesting to a status or level of achievement against a certain standard. (CDP, 2021)
Condition	Refers to the state of ecological systems, which includes their physical, chemical, and biological characteristics and the processes and interactions that connect them. (https://www.epa.gov/report-environment/ecological-condition)
Conservation	The protection, care, management and maintenance of ecosystems, habitats, wildlife species and populations, within or outside of their natural environments, in order to safeguard the natural conditions for their long-term permanence. (IUCN)
Conversion	Human-induced change of a natural ecosystem to another land use or profound change in the natural ecosystem's species composition, structure, and/or function. - Deforestation is one form of conversion (conversion of natural forests) - Conversion includes severe degradation or the introduction of management practices that result in a substantial and sustained change in the ecosystem's former species composition, structure, or function. - Change to natural ecosystems that meets this definition is considered to be conversion regardless of whether or not it is legally permitted. (CDP, 2021)
Deforestation	The human-induced conversion of forested land to non-forested land, which can be permanent, when this change is definitive, or temporary when this change is part of a cycle that includes natural or assisted regeneration, according to the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) as referred to in paragraph 100 of Decision No 1386/2013/EU of the European Parliament and of the Council (25). (Joint ESAs final report on RTS under SFDR, 2021)
Degraded ecosystem	Degradation refers to chronic human impacts resulting in the loss of biodiversity and the disruption of an ecosystem's structure, composition, and functionality. (https://www.ser-rrc.org/what-is-ecological-restoration/)

Dependencies	Aspects of nature's contributions to people that a person or organization relies on to function, including water flow and quality regulation; regulation of hazards like fires and floods; pollination; carbon sequestration. (SBTn, 2020)
(Impact) Drivers	In the context of IPBES, drivers of change are all the factors that, directly or indirectly, cause changes in nature, anthropogenic assets, nature's contributions to people and a good quality of life. Direct drivers of change can be both natural and anthropogenic. Direct drivers have direct physical (mechanical, chemical, noise, light etc.) and behaviour-affecting impacts on nature. They include, inter alia, climate change, pollution, different types of land use change, invasive alien species and zoonoses, and exploitation. Indirect drivers are drivers that operate diffusely by altering and influencing direct drivers, as well as other indirect drivers. They do not impact nature directly. Rather, they do it by affecting the level, direction or rate of direct drivers. Interactions between indirect and direct drivers create different chains of relationship, attribution, and impacts, which may vary according to type, intensity, duration, and distance. These relationships can also lead to different types of spill-over effects. Global indirect drivers include economic, demographic, governance, technological and cultural ones. Special attention is given, among indirect drivers, to the role of institutions (both formal and informal) and impacts of the patterns of production, supply and consumption on nature, nature's contributions to people and good quality of life. (IPBES online glossary)
Ecosystem services	The benefits people obtain from ecosystems. In the Millennium Ecosystem Assessment, ecosystem services can be divided into supporting, regulating, provisioning and cultural. This classification, however, is superseded in IPBES assessments by the system used under "nature's contributions to people". This is because IPBES recognises that many services fit into more than one of the four categories. For example, food is both a provisioning service and also, emphatically, a cultural service, in many cultures (IPBES online glossary).
Ecosystems	A dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit. (IPBES glossary). A typology of ecosystems is provided by the IUCN Global Ecosystem Typology 2.0 (see: https://www.iucn.org/content/iucn-global-ecosystem-typology-20).
Endangered species	A species at risk of extinction in the wild. (IPBES online glossary)
Genes	Segments of DNA that encode the information for a specific protein are known as genes, and all organisms within a species share a common set of genes. (IUCN, 2019, written by Redford et al. "Genetic Frontiers for Conservation")
Genetic resources	The genetic material with real or potential value. (IUCN definitions)
Global Environmental Limits	An environmental limit is usually interpreted as the point or range of conditions beyond which there is a significant risk of abrupt irreversible, or difficult to reverse, changes to the benefits derived from natural resource systems with impacts on human well-being (e.g. planetary boundaries). (Haines-Young, R, Potschin, M,

	Cheshire, D, 2006, Defining and Identifying Environmental Limits for Sustainable Development)
Habitat	The place or type of site where an organism or population naturally occurs. Also used to mean the environmental attributes required by a particular species or its ecological niche. (IPBES online glossary)
Habitat fragmentation	A general term describing the set of processes by which habitat loss results in the division of continuous habitats into a greater number of smaller patches of lesser total and isolated from each other by a matrix of dissimilar habitats. Habitat fragmentation may occur through natural processes (e.g., forest and grassland fires, flooding) and through human activities (forestry, agriculture, urbanization). (IPBES online glossary)
Indigenous peoples and local communities	Indigenous peoples and local communities (IPLCs) are, typically, ethnic groups who are descended from and identify with the original inhabitants of a given region, in contrast to groups that have settled, occupied or colonized the area more recently. (IPBES glossary)
Invasive (alien) species	Species whose introduction and/or spread by human action outside their natural distribution threatens biological diversity, food security, and human health and well-being. ‘Alien’ refers to the species’ having been introduced outside its natural distribution (‘exotic’, ‘non-native’ and ‘non-indigenous’ are synonyms for ‘alien’). ‘Invasive’ means ‘tending to expand into and modify ecosystems to which it has been introduced’. Thus, a species may be alien without being invasive, or, in the case of a species native to a region, it may increase and become invasive, without actually being an alien species. (IPBES glossary)
Key Biodiversity Areas	Key Biodiversity Areas (KBA) are ‘sites contributing significantly to the global persistence of biodiversity’, in terrestrial, freshwater and marine ecosystems. Sites qualify as global KBAs if they meet one or more of 11 criteria, clustered into five categories: threatened biodiversity; geographically restricted biodiversity; ecological integrity; biological processes; and, irreplaceability. The World Database of Key Biodiversity Areas is managed by BirdLife International on behalf of the KBA Partnership.(Integrated Biodiversity Assessment Tool (IBAT)
Land-use (change)	The human use of a specific area for a certain purpose (such as residential; agriculture; recreation; industrial, etc.). Influenced by, but not synonymous with, land cover. Land use change refers to a change in the use or management of land by humans, which may lead to a change in land cover. (IPBES online glossary)
Land-system (change)	Land systems are the terrestrial component of the Earth system, encompassing all processes and activities related to the human use of land. These include socio-economic, technological and organisational inputs and arrangements, as well as the benefits gained from land and the unintended social and ecological outcomes of societal activities. The land systems concept combines land use (the activities, arrangements and inputs associated with land use) with land cover (the ensemble of physical characteristics of land discernible by Earth Observation). (EEA)
Local communities	See ‘Indigenous peoples and local communities’.

Minimization	Measures taken to reduce the duration, intensity and / or extent of impacts that cannot be completely avoided, as far as is practically feasible (Tucker et al. 2020)
Mitigation hierarchy	The sequence of actions to anticipate and avoid impacts on biodiversity and ecosystem services; and where avoidance is not possible, minimize; and, when impacts occur, rehabilitate or restore; and where significant residual impacts remain, offset. (CDP, CSBI, 2015)
Multi-stakeholder initiative	Global institutions involving mainly corporations and civil society organizations, [as] one type of regulatory mechanism that tries to fill this gap by issuing soft law regulation (Mena et al. 2012).
Natural ecosystem	An ecosystem that substantially resembles—in terms of species composition, structure, and ecological function—one that is or would be found in a given area in the absence of major human impacts. This includes human-managed ecosystems where much of the natural species composition, structure, and ecological function are present. (CDP, Afi, 2019)
Natural habitat	Natural habitats are areas composed of viable assemblages of plant and/or animal species of largely native origin, and/or where human activity has not essentially modified an area's primary ecological functions and species composition. (CDP, IFC, 2012)
Natural resources	Resources produced by nature, commonly subdivided into non-renewable resources, such as minerals and fossil fuels, and renewable natural resources that propagate or sustain life and are naturally self-renewing when properly managed, including plants and animals, as well as soil and water. (IUCN definitions)
(Biodiversity) Net gain	See “No Net Loss”: Where the gain exceeds the loss, the term ‘net gain’ may be used instead. (Conway et al., 2013)
(Biodiversity) No Net Loss	In which the impacts on biodiversity caused by a project (or plan or programme) are balanced or outweighed by measures taken to avoid and minimise the project's (plan's or programme's) impacts, to undertake on-site restoration and finally to offset the residual impacts, so that no loss remains. Where the gain exceeds the loss, the term ‘net gain’ may be used Instead. (Conway et al., 2013)
Physical opportunities	Physical opportunities may also have financial implications for organisations, such as increased resilience of business production processes or demand. (TNFD, 2021)
Physical risks	Physical risks resulting from nature loss can be categorised as event driven (acute), or longer-term shifts (chronic) in the way in which natural ecosystems function – or cease to function. Physical risks may have financial implications for organisations, such as direct damage to assets, the loss of (local and regional) ecosystem services crucial to production processes or employee well-being, and indirect impacts from supply chain disruption. These risks may also have financial and non-financial implications for other parties, such as the loss of global ecosystem services crucial to human well-being. (TNFD, 2021)
Planetary Boundaries	This concept allows to estimate a safe operating space for humanity with respect to the functioning of the Earth. The boundary level for each key Earth System process that should not be

	transgressed if we are to avoid unacceptable global environmental change, is quantified (Rockström et al. 2009). The selection of planetary boundaries emerges from the definition of what constitutes unacceptable human-induced global environmental change. The position of a planetary boundary is a function of the degree of risks the global community is willing to take, e.g., how close to an uncertainty zone around a dangerous level or threshold of a Earth System process humanity is willing to place itself, and/or how long a boundary can temporarily be transgressed before a threshold is crossed. The position is furthermore a function of the social and ecological resilience of the impacted society. Boundaries are identified for processes where the time needed to trigger an abnormal irreversible change within an ethical time horizon – a timeframe short enough to influence today's decisions yet long enough to provide the basis for sustainability over many generations to come, and within which decisions taken can influence whether or not the estimated threshold is crossed. (Rockström et al. 2009).
Preservation	The set of policies and measures to maintain the conditions favouring the evolution and continuity of the ecosystems and natural habitats, as well as the conservation of viable populations of species in their natural environments and the components of biodiversity outside their natural habitats. (IUCN definitions)
Pressures	Human activities exert pressures on the environment and affect its quality and the quantity of natural resources. (OECD, 2003)
Prior Informed Consent	is the permission given by the competent national authority of a provider country to a user prior to accessing genetic resources, in line with an appropriate national legal and institutional framework. (CBD, 2010)
Protected area	A protected area is a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values. (IUCN, 2018) The Common Database on Designated Areas (CDDA) is more commonly known as Nationally designated areas. It is the official source of protected area information from European countries to the World Database of Protected Areas (WDPA).
Raw material	Raw material – primary or secondary material that is used to produce a product. (ISO 14040:2006)
Rehabilitation	measures taken to rehabilitate degraded ecosystems or restore cleared ecosystems following exposure to impacts that cannot be completely avoided and/or minimised. (Tucker et al. 2020)
Responses	Society responds to these changes through environmental, general economic and sectoral policies and through changes in awareness and behaviour ('societal response') (OECD, 2003).
Restoration	Any intentional activities that initiates or accelerates the recovery of an ecosystem from a degraded state. (IPBES glossary)
Smallholders	Small-scale agricultural or forest producers with high dependence on family labour, generally having low levels of productivity, small land footprint, significant economic and information constraints

	and/or farmers profit being the primary source of income for the smallholder and their family. (CDP, Afi, 2019)
Species	An interbreeding group of organisms that is reproductively isolated from all other organisms, although there are many partial exceptions to this rule in particular taxa. Operationally, the term species is a generally agreed fundamental taxonomic unit, based on morphological or genetic similarity, that once described and accepted is associated with a unique scientific name. (IPBES online glossary)
Sustainable economy	A sustainable economy is one that is resilient and provides a good quality of life for everybody. It stays within the limits of the planet and helps keep global warming within the well below 2°C threshold. (WWF)
Sustainable use (of biodiversity components) and its	The use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations. (IPBES online glossary)
System risks	Systemic risks can refer to (i) the risk that a critical natural system no longer functions properly; (ii) risks that arise at portfolio-level (rather than at organisation or transaction-level) of a financial institution; and (iii) a risk to system-wide financial stability. (TNFD, 2021)
Thresholds	A sustainable future relies on ensuring that no one falls short on life's essentials, and that collectively we do not overshoot our pressure on Earth's life-supporting systems. Societal or ecological thresholds identified by science help establish the foundations and ceilings that earth and society should seek to operate within to prevent harm to people and the natural environment. (https://impactmanagementplatform.org/thresholds-and-allocations/)
Traceability	The ability to follow a product or its components through stages of the supply chain (e.g. production, processing, manufacturing, and distribution). (CDP, Afi, 2019)
Traceability system	System that tracks by documentation the trail of products and/or raw materials along the value chain. (CDP, 2021)
Transition opportunities	Transition opportunities may occur when businesses benefit financially due to changes in market preferences/demands that reward the positive impact they have on nature. (TNFD, 2021)
Transition risks	Transitioning to a nature-positive economy may entail extensive policy, legal, technology, and market changes. Transition risks resulting from nature may occur when businesses suffer financially due to changes that penalize the negative impact they have on nature, including reputation, compliance, and liability or litigation risks. In some cases, this may result in an asset becoming unprofitable and "stranded". (TNFD, 2021)

WORKING PAPER

Appendix B: Application Guidance

This appendix is an integral part of the proposed [draft] ESRS E4 Biodiversity and Ecosystems. It describes the application of the requirements set for in paragraphs 11-107 and has the same authority as the other parts of the [draft] ESRS Standard.

Specific biodiversity and ecosystems-related disclosures for the implementation of ESRS 2 Strategy and business model

[Disclosure Requirement 1] – Transition plan in line with the targets of no net loss by 2030 and net gain by 2050

- AG1. When disclosing its transition plan, the undertaking is expected to provide a high-level explanation on how it will adjust its strategy and business model to ensure compatibility with the targets of no net loss by 2030 and, through recovery and restoration, net gain by 2050.
- AG2. The undertaking shall, where applicable, refer to and contextualise information presented under other disclosures requirements of this [draft] standard.
- AG3. When describing its transition plan, the undertaking shall highlight the main identified drivers of biodiversity loss and possible mitigation actions and in particular the main path-dependencies and locked-in assets and resources (e.g. plants, raw materials) that are associated with biodiversity and ecosystems loss.
- AG4. When disclosing the information required under paragraph 15, the undertaking shall explain how its business development strategy interacts with the achievability of its transition plan.
- AG5. The undertaking may make specific reference to international frameworks used in the developing of the Transition Plan in line with the targets of no net loss by 2030 and net gain by 2050 (e.g. the Post-2020 Global Biodiversity Framework from the Convention for Biological Diversity, or the work of the intergovernmental science-policy platform for biodiversity and ecosystem services (IPBES)).

[Disclosure Requirement 2] – Resilience of the Strategy and Business Model to principal biodiversity and ecosystems-related physical and transition risks

- AG6. The resilience assessment required by paragraph 16 shall at least include:
- (a) whether the business model(s) has been verified by using a range of biodiversity and ecosystems scenarios with different possible pathways;
 - (b) if scenarios specific to biodiversity and ecosystems, or other scenarios with a modelling of biodiversity and ecosystems related consequences have been conducted;
 - (c) why those specific scenarios were taken into consideration;
 - (d) key assumptions taken;
 - (e) the time horizon of the considered scenarios;
 - (f) how the considered scenarios are updated according to evolving conditions and emerging trends;
 - (g) whether the scenarios are informed by expectations in authoritative intergovernmental instruments such as the Convention for Biological Diversity and, where relevant, by scientific consensus, that is, in the case of biodiversity and ecosystem services, the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES).
- AG7. The undertaking may refer to “Methodological Assessment Report on Scenarios and Models of Biodiversity and Ecosystem Services” published by the IPBES in 2016¹⁴.

¹⁴ <https://ipbes.net/assessment-reports/scenarios>

- AG8. The description of the resilience assessment shall cover the regular involvement of relevant stakeholders, including, where appropriate, holders of indigenous and local knowledge, throughout the entire process of scenario development and analysis.

Specific biodiversity and ecosystems-related disclosures for the implementation of ESRS 3 Governance and organisation

[Optional Disclosure Requirement 3] – Internal biodiversity and ecosystems-related pricing schemes

- AG9. The types of internal biodiversity and ecosystems pricing schemes that are applied may include:
- (a) shadow prices for:
 - (i) CapEx decision making;
 - (ii) R&D investment decision making;
 - (b) internal biodiversity and ecosystems fee or fund affecting the internal results of the business units or operating segments;
 - (c) other schemes to be specified.
- AG10. For each of these schemes, the undertaking should provide a narrative explanation of how the scheme works including at least:
- (a) the precise perimeter of application (activities, geographies, entities, etc.);
 - (b) the price per the metric chosen;
 - (c) the annual volume of the metric chose covered in relation to the total volumes of the undertaking.
- AG11. When the undertaking has not, or not fully, implemented internal biodiversity and ecosystems pricing schemes, it should disclose whether such incentives are planned for the future or planned to be expanded.

Presentation of information

- AG12. The quantitative information may be presented using the following table format:

Internal biodiversity and ecosystems pricing incentives	Yes / No	Volume at stake	Prices applied (€/m ³)	Perimeter description
CapEx shadow price				
R&D investment shadow price				
Internal biodiversity and ecosystems fee/fund				
Other				

Connectivity with financial reporting

- AG13. The undertaking shall make a reference to the description of the internal pricing schemes in the financial statements.

AG14. If such link cannot be made because the financial statements are silent on internal biodiversity and ecosystems pricing schemes, the undertaking shall include a reference to the related line item in the financial statement for the financial datapoints related to the current period as follows:

- (a) the undertaking shall include a cross-reference to the related line item in the financial statements;
- (b) if the financial information cannot be directly cross-referenced to a line item in the financial statement, the undertaking shall provide a quantitative reconciliation table between each information required by the paragraph 21 (current year) and the financial statements. The undertaking may use the format of the table for reconciliation shown below:

Amount disclosed in the sustainability statement as per paragraph 21 (current period)	
Other	
Total (as reported in the financial statements) current period	

[Disclosure Requirement 4] – Roles and responsibilities of governance bodies on public policy influence

AG15. When describing its engagement in activities that influence public policy on biodiversity and ecosystems, the undertaking shall consider direct engagement with policy makers, trade associations, funding research organisations, etc.

AG16. The undertaking shall state whether it has worked with policymakers to develop or advocate for policy changes specifically designed to contribute to biodiversity and ecosystems issues over the reporting period and it may disclose specific examples of advocacy activities for nature-positive policies and regulation.

AG17. In the cases where the undertaking has worked with policy makers, it shall describe the results of this engagement with policy makers and advocates, and consider the following:

- (a) specific institutional, industry, or regulatory reforms;
- (b) the progress of relevant policies (e.g. policies for better local ecosystem management);
- (c) support in name and/or signed petitions;
- (d) the provision of active staff time or financial support;
- (e) public communication of the positions the undertaking advocates for and the methods that it uses for advocacy related to biodiversity and ecosystems.

AG18. The disclosure required by paragraph 24 shall cover:

- (a) a description of the processes the undertaking has in place to ensure that these activities are consistent with its biodiversity and ecosystems policies, commitments and targets;
- (b) a description of the undertaking's rationale and strategy for prioritising engagements with stakeholders on biodiversity and ecosystems aspects;
- (c) a description of the result of this engagement, included whether it has produced clear outputs or actions and how stakeholder inputs have been used.

AG19. The list of stakeholders to consider the list shall include but not be limited to the following: employees, investors, local communities, NGOs, other biodiversity and ecosystems-dependant commodity users/ producers at a local level, regulators, suppliers, customers, biodiversity or ecosystem protection authorities, ecosystem / land use (change) spatial planning authorities.

Specific biodiversity and ecosystems-related disclosures for the implementation of ESRS 4 Impacts, Risks and Opportunities

[Disclosure Requirement 5] – Identification and assessment processes of biodiversity and ecosystems services, dependencies and impacts

- AG20. The disclosure required by paragraph 28 (a) shall include identifying and assessing the state of biodiversity and ecosystems, as well as the physical connection between ecosystems (e.g. green corridors).
- AG21. The undertaking may use the tool 'Exploring Natural Capital Opportunities, Risks and Exposure' ('ENCORE') to address the materiality of impact drivers in disclosure requirement 28 (b).
- AG22. The disclosure required by paragraph 28 shall cover the process for conducting consultations with indigenous local communities on sustainability assessment of shared biological resources and ecosystems. And in particular:
- (a) when a site or a raw material production or sourcing is likely to adversely impact ecosystem services, as determined by the identification process above, the undertaking should identify the specific sites and raw materials production or sourcing with adverse or potential adverse impacts on indigenous and local communities;
 - (b) when indigenous and local communities are likely to be impacted, the undertaking shall indicate how they were involved in the determination of material ecosystem services.
- AG23. With respect to impacts on priority ecosystem services of relevance to affected communities and where the undertaking has direct management control or significant influence over such ecosystem services, it shall indicate how adverse impacts may be avoided. If these impacts are unavoidable, the undertaking may indicate its plans to minimise them and implement mitigation measures that aim to maintain the value and functionality of priority services. With respect to impacts on priority ecosystem services on which the project depends, the undertaking may indicate its plans to minimise impacts on ecosystem services and implement measures that increase resource efficiency of their operations.
- AG24. To assess the materiality of geographical locations required in paragraph 29 (a), the undertaking shall use a methodology that allows to assess how its operations or its value chain cause high impacts or are likely to cause high impacts on biodiversity and ecosystems, including:
- (a) frequency of occurrence;
 - (b) speed of impact;
 - (c) severity of impact;
 - (d) potential for mitigation.
- AG25. The undertaking shall consider impact:
- (a) on threatened species (IUCN Red list¹⁵, the EU Habitat Directive¹⁶ and national lists of threatened species);
 - (b) on protected areas, with possible reference to the Protected Planet database, which contains a source of data on protected areas and other effective area-based conservation measures (OECMs)¹⁷;

¹⁵ The IUCN Red List can be found here: <https://www.iucnredlist.org/>

¹⁶ The Habitats directive can be found here: https://ec.europa.eu/environment/nature/legislation/habitatsdirective/index_en.htm

¹⁷ The database can be found here: <https://www.protectedplanet.net/en>

- (c) on key biodiversity areas, with possible reference to the Key Biodiversity Areas database¹⁸.
- AG26. In addition, to assess the materiality of geographical locations, the undertaking shall use a methodology that allows to assess how its operations or its value chain depend on raw materials, natural resources or ecosystem services that are disrupted or likely to be, including:
- (a) loss of functionality;
 - (b) financial loss.
- AG27. The undertaking may use the tool 'Exploring Natural Capital Opportunities, Risks and Exposure' ('ENCORE')¹⁹ to address the materiality of geographical locations and of impact drivers. The undertaking may also use the biodiversity risk and opportunity assessment tool designed by IUCN page 18 of the 'Biodiversity Indicator and Reporting System (BIRS)'.

Presentation of information

- AG28. The undertaking may use the below tables, as per the proposed materiality approach by 'ENCORE', to present their materiality assessment of their sites by geographical locations.

Natural element / Raw material / Ecosystem service	Potential dependencies	
...		
...	Loss of functionality	Financial loss
....	limited, moderate or severe	limited, moderate or severe

Geographical location of site	Threatened species, protected areas, key biodiversity areas	Potential impacts			
		Frequency of occurrence	Speed of impact	Severity of impact	Potential for mitigation

¹⁸ The database can be found here: <https://www.keybiodiversityareas.org/kba-data>

¹⁹ The tool 'ENCORE' can be found here: <https://encore.naturalcapital.finance/en> and requires registration but is free of charge. It is only available to work on your own operations currently.

		high, medium or low	<1 year or 1-3 years or >3 years	high, medium or low	high, medium or low

AG29. To assess the materiality of raw materials required in disclosure requirement 29 (b) the undertaking shall use a methodology that allows to assess how its raw materials production, sourcing or consumption cause high impacts or are likely to cause high impacts on biodiversity and ecosystems, or how an undertaking depends on raw materials that are disrupted or likely to be. This methodology shall to the minimum consider the following data:

- (a) raw material;
- (b) region or country of sourcing;
- (c) related threatened species or threatened ecosystems, as well as protected areas and key biodiversity areas.

AG30. The undertaking may refer to the tool 'Trase'²⁰ on deforestation risk to assess material raw materials, or may refer to the tool 'Bioscope'²¹ to assess the impact drivers of biodiversity loss for raw materials and to address the materiality of impact drivers of biodiversity loss by raw material.

AG31. In order to be able to disclose information under paragraph 31, the undertaking may aggregate the number of material sites by region, the mean number of threatened species or ecosystems on those identified material sites and a globalised view of impact drivers of biodiversity loss material dependencies for the undertaking across operations and value chain.

[Disclosure Requirement 6] - Material biodiversity and ecosystems dependencies and impacts, and material biodiversity loss drivers

AG32. For the identification of biodiversity and ecosystems-related dependencies, the undertaking can rely on the common international classification of ecosystem services such as the Common International Classification of Ecosystem Services (CICES)²².

AG33. The undertaking shall consider definitions of material drivers provided by authoritative sources such as the most recent Threats Classification Scheme by the IUCN²³, which largely forms the basis for the drivers listed by ENCORE²⁴, or the impact drivers' list from the Global Assessment Report by IPBES²⁵.

²⁰ The tool 'Trase' can be found here: <https://supplychains.trase.earth/>. It only covers deforestation risk and for a limited number of countries to date.

²¹ The tool 'Bioscope' can be found here : <https://bioscope.info/>. It covers commodities and resources purchased from 170 sectors in 43 countries, including the EU countries.

²² The classification CICES can be found here : <https://cices.eu/>. It has been developed from the work on environmental accounting undertaken by the European Environment Agency (EEA).

²³ The Threat Classification Scheme can be found here : <https://www.iucnredlist.org/resources/threat-classification-scheme>

²⁴ The ENCORE's drivers' list can be found here : <https://encore.naturalcapital.finance/en/data-and-methodology/drivers>

²⁵ The IPBES drivers' list can be found here : <https://ipbes.net/models-drivers-biodiversity-ecosystem-change>

- AG34. The disclosure required by paragraph 33 shall include a breakdown of locations of the undertaking's facilities according to the impacts and dependencies identified, and to the ecological status of the areas where they are located.

Presentation of information

- AG35. The undertaking may use the below table for presentation.

Where are the undertaking's facilities located?	Absolute number of facilities (and percentage of the total)
In areas with species listed on the IUCN Red List of Threatened Species, the Habitats Directive or on national list of threatened species	
In officially recognized Protected Areas	
In other Key Biodiversity Areas	

- AG36. When compiling information on sites, the undertaking may include information about sites for which future operations have been formally announced.
- AG37. When disclosing information under paragraph 33 (b) the undertaking:

- (a) shall take into account its knowledge of its material suppliers' geographical site locations, as well as the impacts and dependencies, in relation to threatened species (IUCN Red List of Species, the Habitats Directive threatened species, national lists of threatened species), officially recognised protected areas and key biodiversity areas.
- (b) may disclose the percentage of its suppliers' facilities which are located in risk prone areas (with threatened species on the IUCN Red List of Species, the Habitats Directive or nationally list of threatened species, or in officially recognised Protected Areas and Key Biodiversity Areas).
- (c) may disclose the percentage of its procurement spend from suppliers with facilities which are located in risk prone areas (with threatened species on the IUCN Red List of Species, the Habitats Directive or nationally list of threatened species, or in officially recognised Protected Areas and Key Biodiversity Areas).

- AG38. The disclosure required by paragraph 34 shall include a breakdown of raw materials of the undertaking according to the impacts and dependencies identified, and to the ecological status of the areas where they are production or sourcing.

Presentation of information

- AG39. The undertaking may use the below table for presentation.

Where are the raw materials produced or sourced from?	Absolute weight of raw materials (and percentage of the raw material weight)

In areas with species listed on the IUCN Red List of Threatened Species, the Habitats Directive or on national list of threatened species	
In officially recognized Protected Areas	
In other Key Biodiversity Areas	

[Disclosure Requirement 7] – Processes to identify material biodiversity and ecosystems risks and opportunities

- AG40. The disclosure required by paragraph 36 shall include a description of:
- (a) the processes for identifying and assessing biodiversity and ecosystems-related short-, medium- and long-term physical risks, including:
 - (i) the identification of geographical location of own assets and value chain;
 - (ii) the methodologies to screen its activities in order to identify its actual and potential biodiversity and ecosystems physical risks in its own operations and value chain;
 - (iii) the definition of the considered time horizons, scenario analysis, assessment of size and scale of the risks and opportunities and how principal physical risks are selected, in consideration of severity (scale, scope, remediability) and likelihood criteria;
 - (iv) adaptation solutions that can reduced the identified physical biodiversity and ecosystems risks;
 - (b) the process for identifying and assessing biodiversity and ecosystems-related short, medium- and long-term transition risks and opportunities.

[Disclosure Requirement 8] - Material biodiversity and ecosystems-related physical and transition risks and opportunities

- AG41. The disclosure required by paragraph 49 shall cover:
- AG42. the undertaking's principal biodiversity and ecosystems-related risks by categories within operations and along the rest of the value chain: physical risks, transition risks (regulatory, market, financial), other risks including reputational, financing and value chain;
- AG43. the undertaking's principal biodiversity and ecosystems-related opportunities by categories within operations and along the rest of the value chain: transition opportunities (regulatory, market, financial), other opportunities including reputational, financing and value chain;

Policies, Targets, Action Plans and Resources

[Disclosure Requirement 9] – Policies implemented to manage biodiversity and ecosystems

- AG44. When disclosing policies in relation to paragraph 44 and following and if the undertaking refers to third-party standards of conduct, the undertaking should consider whether the standard used²⁶:
- (a) is objective and achievable based on a scientific approach to identifying issues, and realistic in assessing how these issues can be addressed on the ground under a variety of practical circumstances;
 - (b) is developed or maintained through a process of ongoing consultation with relevant stakeholders with balanced input from all relevant stakeholder groups, including producers, traders, processors, financiers, local people and communities, indigenous peoples, and civil society organisations representing consumer, environmental and social interests, with no group holding undue authority or veto power over the content;
 - (c) encourages step-wise and continuous improvement—both in the standard and its application of better management practices, and require the establishment of meaningful targets and specific milestones to indicate progress against principles and criteria over time;
 - (d) is verifiable through independent certifying or verifying bodies—which have defined and rigorous assessment procedures that avoid conflicts of interest, and are compliant with ISO guidance on accreditation and verification procedures;
 - (e) conforms to the ISEAL Code of Good.
- AG45. When disclosing policies regarding the sustainable production, consumption and sourcing of raw materials, the undertaking may²⁷:
- (a) refer to recognised standards or third-party certifications in accordance with AG44.
 - (b) refer to traceability systems and verification practices that could identify where the supply is coming from, and if species and ecosystems may be at risk;
 - (c) refer to policies limiting procurement from suppliers that can demonstrate that they are not contributing to significant conversion of protected areas or key biodiversity areas (e.g. through certification);
 - (d) refer to what actions the undertaking may take to shift suppliers when they contribute to significantly adversely impacting those protected areas or key biodiversity areas.
- AG46. When disclosing policies related to social consequences of biodiversity and ecosystems related dependencies and impacts, the undertaking shall notably refer to the Nagoya Protocol²⁸ and the Convention for Biological Diversity (CBD)²⁹, but may also refer to IFC Performance Standard 4, 5 and 7³⁰ and the Core Principles from the Accountability Framework, Principle 2 'Respect for Human Rights'³¹.

²⁶ AG 52 refers to IFC Performance Standard 6.

²⁷ AG 53 refers to IFC Performance Standard 6.

²⁸ The Nagoya Protocol can be found here: <https://www.cbd.int/abs/>

²⁹ The Convention for Biological Diversity can be found here: <https://www.cbd.int/convention/>

³⁰ IFC Performance Standards can be found here : https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/publications/publications_handbook_pps

³¹ The Accountability Framework Core Principles can be found here : <https://accountability-framework.org/the-framework/contents/core-principles/>

[Disclosure Requirement 10] – Measurable targets for biodiversity and ecosystems

- AG47. The undertaking shall describe how targets are tightly connected with material impacts, material sites and raw materials disclosed in the section 'risks and opportunities'. If they are not, the undertaking shall provide a comprehensive justification as to why a material impact, site, raw material is not covered by a target.
- AG48. When disclosing the information required under paragraph 49, the undertaking shall specify for each target, how it is embedded in the undertakings biodiversity and ecosystems policy or other policies (e.g. remuneration policies, investment policies, supply chain policies etc.).
- AG49. Targets related to impacts on biodiversity and ecosystems and biodiversity loss impact drivers shall adhere to the mitigation hierarchy and disclose how they have adhered to it. Priority shall be given to setting targets for 'avoidance', and then 'minimisation' before 'rehabilitation/restoration' targets.
- AG50. Targets related to material biodiversity loss drivers shall pertain to impact drivers that unequivocally influence biodiversity and ecosystems processes, including, but not limited to, land-use change, climate change, pollution, natural resource use and exploitation, as well as invasive species.
- AG51. Targets related to material raw materials shall follow the mitigation hierarchy 'avoidance' and 'minimisation' before working on 'sustainable production'.
- AG52. To improve comparability, when setting new targets, the undertaking shall select a recent base year preceding the first reporting year of the new target period by a maximum of 3 years. For example, for 2030 as the target year and a target period between 2025 and 2030, the base year shall be selected between 2022 and 2025.
- AG53. The baseline value and year shall not be changed unless significant scope changes occur. In such case, the undertaking shall explain how the new baseline value affects the target, its achievement and presentation of progress over time. From 2025, the undertaking may update its base year in relation to the target years in five-year rolling periods. For instance, for the target year 2030 the base year would be 2025; in 2030 the new target year would 2035 and achievement is measured against the baseline value from 2030 etc.

Presentation of information

- AG54. The targets shall be presented in a table or as a graph, as illustrated below:

Type of target (defined by year and value)	Baseline value and year	Milestones			Target
Target on avoidance...					

- AG55. When disclosing information required under paragraph 49, for the purpose of setting targets the undertaking can consider the need for an informed and willing consent of local and indigenous communities, the need for appropriate consultations and the need to respect the decisions of these communities.

[Disclosure Requirement 11] – Biodiversity and ecosystems action plans

- AG56. As regards to paragraph 62 (c), the undertaking shall consider 'avoidance' actions and action plan which prevent damaging actions before they take place. Avoidance often

involves a decision to deviate from the business-as-usual project development path. The clearest examples of avoidance are altering the footprint of a project to avoid destruction of natural habitat on the site and/or establishing set-asides where priority biodiversity values are present and will be conserved. At a minimum, avoidance should be considered where there are biodiversity values that are in one of the following categories: particularly vulnerable and irreplaceable, of particular concern to stakeholders, or where a cautious approach is warranted due to uncertainty in impact assessment or the efficacy of management measures. There are three major types of avoidance:

- (a) avoidance through Site Selection (Locate the entire project away from areas recognized for important biodiversity values);
- (b) avoidance through Project Design (Configure infrastructure to preserve areas at the project site with important biodiversity values); and
- (c) avoidance through Scheduling (Time project activities to account for patterns of species behaviour (e.g., breeding, migration) or ecosystem functions (e.g., river dynamics)).

AG57. 'Minimisation' reduces the extent, intensity, and duration of impacts on biodiversity that are not prevented by avoidance.

AG58. As regards to paragraphs 62 (k) and 62 (l), the undertaking shall specify if a given action plan is:

- (a) carried out only by the undertaking, using the undertaking's resources, at the level of the undertaking's operations,
- (b) or if the undertaking is leading an action plan which involves the contribution of other stakeholders (competitors, suppliers, retailers, other business partners, local communities and authorities, government agencies...)
- (c) or if the undertaking is taking part in a wider action plan, of which it is a member; it shall then provide more information on the project, its sponsors and other participants.

AG59. Where disclosing information on resources, the undertaking shall consider expenditures in relation to the adoption of new technologies, R&D, refurbishment or replacement of industrial facilities (e.g., in case of no net loss 2030 or full recovery 2050 transition plan in high-risk sectors).

Presentation of information

AG60. The information on resources allocation shall be presented in the form of a table and should be broken down between capital expenditures and operating expenditures, and across the relevant time horizons, at minimum for the current reporting year resources, and the planned allocation of resources over specific time horizons (3-5 years). The undertaking may follow the illustrative presentation here after:

Corresponding target	Name of action plan / actions	Dedicated resources						
		R&D	Past CAPEX	Past OPEX	Current CAPEX	Current OPEX	Future CAPEX	Future OPEX
		Current year	Comparative period		Current year		Next five years	
Action Plan								

Connectivity to financial statements

AG61. For R&D expense, Capex and Opex, the undertaking:

- (a) shall include a reference to the related line item in the financial statements;

- (b) If the financial information cannot be directly cross-referenced to a line item in the financial statements, the undertaking shall provide a quantitative reconciliation table between the information required under paragraph AG60. above and financial statements. The undertaking may use the format of the table for reconciliation shown below:

Amount disclosed in the sustainability statement as per par. AG60. (R&D expense / opex / capex)	
Other R&D expense / opex / capex	
Total R&D expense / opex / capex (as reported in the financial statements) current period	

- AG62. When applicable, the amounts of capital expenditure shall be consistent with the EU taxonomy related key performance indicator. Operating expenditure may have a broader meaning here including for instance any necessary personnel-related expenses. In any case, the differences between capital and operating expenditure under these Disclosure Requirements and under the EU taxonomy regulation shall be explained.

Performance Measurement

- AG63. The following paragraphs lay out more guidance to be followed by the undertaking when disclosing information under Disclosure Requirements 12 to 15.
- AG64. According to the characteristics laid out under paragraph 65(a), indicators should use technically robust and verifiable information, as well as data and methods from a scientific perspective that are fit for decision making and responsive to decision making over the appropriate timeframe and spatial scale. For example, there should be an accepted theory of the relationship between the indicator and the purpose, with agreement that change in the indicator indicates change in the issue of concern. Uncertainties should be reduced as far as possible. Data or mechanisms used should be supported by well-established organisations and updated over time. Robust modelled data and expert judgment can be used where data gaps exist³². The methodology must be sufficiently detailed to allow for meaningful comparison of impacts and mitigation activities over time. Information gathering processes and definitions must be systematically applied. This allows a meaningful review of an undertaking's performance over time and helps internal and peer comparison³³.
- AG65. According to the characteristics laid out under paragraph 65 (a), limitations may include incompleteness of datasets, lag in responsiveness of the indicators that can obscure performance, difficulty to communicate complex results.
- AG66. The biodiversity baseline as per paragraph 65 (f) is an essential component of the larger biodiversity and ecosystems management process. The baseline is necessary to inform impact assessment and management planning, as well as monitoring and adaptive management³⁴. The undertaking may refer to the work in 'Good Practices for the Collection of Biodiversity Baseline Data' (Gullison, 2015) for baseline creation.
- AG67. If the metric corresponds to a target, the baseline for both should be aligned.
- AG68. The Pressure-State/Impact-Response model referred to in paragraph 69 provides a commonly accepted framework for identifying and structuring indicators. It distinguishes

³² Source: UNEP-WCMC, Conservation International and Fauna & Flora International, 2020.

³³ Source: UNEP-WCMC, Conservation International and Fauna & Flora International, 2020.

³⁴ Source: Gullison, R.E., J. Hardner, S. Anstee, M. Meyer. 2015. Good Practices for the Collection of Biodiversity Baseline Data. Prepared for the Multilateral Financing Institutions Biodiversity Working Group & Cross-Sector Biodiversity Initiative.

indicators of environmental pressures, indicators of environmental conditions, and indicators of societal responses, developed by the OECD³⁵.

AG69. The Pressure-State/Impact-Response model considers that:

- (a) human activities exert pressures on the environment and affect its quality and the quantity of natural resources ('state/impact');
- (b) society responds to these changes through environmental, general economic and sectoral policies and through changes in awareness and behaviour ('societal response').

AG70. The model highlights these cause-effect relationships, and helps decision makers and the public see environmental, economic, and other issues as interconnected. It thus provides a means of selecting and organising indicators in a way useful for decision-makers and the public, and of ensuring that no material issue has been overlooked³⁶.

[Disclosure Requirement 12] – Pressure metrics

AG71. The accidental or voluntary introduction of invasive alien species is one of the most common threats to species, as well as a very important factor in ecosystems' decline and deterioration. Hence, the undertaking shall disclose under paragraph 78, if the impact driver is material, how it manages the risks posed by invasive alien species in its own operations and its value chain. The undertaking may disclose, for example, the number of invasive alien species identified in or adjacent to the undertaking's own operations or its value chain sites.

Presentation of information

AG72. The undertaking may present the information following the table design below:

	Current year	Target achieved %	Comparative
Performance disclosure			

[Disclosure Requirement 13] – Impact metrics

Presentation of information

AG73. When disclosing information required under Disclosure Requirement 13, the undertaking may present the information following the table design below:

	Current year	Target achieved %	Comparative
Performance disclosure			

[Disclosure Requirement 14] – Response metrics

Presentation of information

³⁵ OECD (2019), "The Post-2020 Biodiversity Framework: Targets, indicators and measurability implications at global and national level", November version.

³⁶ Source: OECD (2003), OECD Environmental Indicators, development, measurement and use, annex 2.

- AG74. When disclosing information required under Disclosure Requirement 14, the undertaking may present the information following the table design below:

	Current year	Target achieved %	Comparative
Performance disclosure			

- AG75. When disclosing information under Disclosure Requirement 14 the undertaking can consider the need for an informed and willing consent of local and indigenous communities, the need for appropriate consultations and the need to respect the decisions of these communities.

[Optional Disclosure Requirement 15] – Sustainable consumption and production metrics

Presentation of information

- AG76. When disclosing information required under Disclosure Requirement 15, the undertaking may present the information following the table design below:

	Current year	Target achieved %	Comparative
Performance disclosure			

[Disclosure requirement 16] – Financial exposure to physical risks

- AG 1. Principal biodiversity and ecosystems-related physical risks may affect the financial position (owned assets) and performance (potential future increase/decrease in revenues and costs due to business interruptions, increased supply prices, etc. resulting in potential margins erosions) of the undertaking.

Calculation rules

- AG 2. When disclosing the information required under paragraph 90 (a) and (b), the undertaking shall explain whether and how it has conducted a vulnerability assessment of the assets and activities to determine effects on future financial performance and position. The process to be followed by the undertaking shall:
- (a) start from the outcome of the physical risk identification and assessment process. The detailed vulnerability assessment calculation rules and methodology may be based on free definitions as they depend on the undertaking's industry and organisation specific biodiversity and ecosystems management. On the contrary, the description of the methodologies and definitions used by the undertaking, including at least the scope of application, the methodology assumptions and limitations and the critical parameters used, shall be disclosed both for the net assets and the share of turnover from business activities exposed to physical risks;
 - (b) assess the amount (monetary unit) of assets exposed to physical risks as a range of net assets value, resulting from the sum of owned assets considered at risk following the vulnerability assessment;
 - (c) assess the share of business activities exposed to physical risks as a list of business activities, possibly by operating segment, with their percentage of total revenues, the vulnerability factors (location, hazards, events) and when possible the magnitude of the potential financial effects in terms of margin erosion over the short-, medium- and long-term.
- AG 3. The disclosures shall not include amounts that are already accounted for in the financial statements.

AG 4. The amount (monetary unit) of assets exposed to physical risks may be presented as a range of net assets value.

AG 5. The undertaking may use the following table.

Physical risks	Potential financial impact	N	Estimated range in future years	Comments Eg: related business activities; vulnerability factor (location, hazards, events)
	Reduced revenue from decreased production capacity (e.g., transport difficulties, supply chain interruptions)			
	Reduced revenue and higher costs from negative impacts on workforce (e.g., health, safety, absenteeism)			
	Write-offs and early retirement of existing assets (e.g., damage to property and assets in 'high-risk' locations)			
	Increased operating costs (e.g., inadequate water supply for hydroelectric plants or to cool nuclear and fossil fuel plants)			
	Increased capital costs (e.g., damage to facilities)			
	Reduced revenues from lower sales/output			
	Increased insurance premiums and potential for reduced availability of insurance on assets in 'high-risk' locations			

Connectivity with financial reporting

AG 6. For the net assets, the reconciliation to the most relevant amount presented in the financial statements shall be structured as follows:

- (a) the undertaking shall include a cross-reference to the related line item in the financial statement.
- (b) if it can't be directly cross-referenced to a line item in the financial statement, the undertaking may provide a quantitative reconciliation table between [the net current assets value as required in 'Financial exposure to physical risks' and financial statements. The undertaking may use the format of the table for reconciliation shown below:

Net current assets value used to calculate the current assets exposed to physical risks ('Financial exposure to physical risks')	
Net current assets value (other)	

Net current assets value (Financial statements)	
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AG 7. For the financial datapoints (current year) related to the share of revenues from business activities exposed to physical risks, the undertaking shall include a reference to the related line item in the financial statement as follows:

- (a) the undertaking shall include a cross-reference to the related line item in the financial statement.
- (b) if it cannot be directly cross-referenced to a line item in the financial statement, the undertaking may provide a quantitative reconciliation table between [the financial datapoints related to the share of business activities exposed to physical risks as required in 'Financial exposure to physical risks' and financial statements. The undertaking may use the format of the table for reconciliation shown below:

Turnover / OpEx / R&D / investments / write off / impairments (current year) related to 'share of business activities exposed to physical risks', ('Financial exposure to physical risks')	
Turnover / OpEx / R&D/ investments / write off / impairments (current year) (other)	
Turnover / OpEx / R&D / investments / write off / impairments (current year) (Financial statements)	

AG 8. The undertaking shall include a statement of consistency illustrating the consistency of data and of assumptions made in sustainability reporting to assess the financial exposure to physical risks with the corresponding data and assumptions used for the financial statements (e.g. impairment of assets, useful life of assets, estimates and provisions).

AG 9. A reference to the relevant paragraphs of the financial statements shall be included in the statement of consistency. If the assumptions are not consistent, the statement of consistency should state that fact and explain the reason. (e.g., the full financial implications of biodiversity and ecosystems-related risks are still under assessment or are not deemed material).

AG 10. The undertaking may consider areas such as biodiversity and ecosystems-related indicators of impairment of assets, impacts of biodiversity and ecosystems-related matters on useful life of assets, assessment of provisions to reflect new environmental laws and biodiversity and ecosystems-related commitments by the entity, etc.

[Disclosure Requirement 17] – Financial exposure to transition risks

AG77. Currently no commonly agreed methodology exists to assess or measure how biodiversity and ecosystems-related transition risks and opportunities may affect the future financial position and performance of the undertaking, especially as these risks and opportunities may be closely interlinked with other environmental topics such as climate change, pollution or water and marine resources, the disclosure required by paragraph 88 remains largely based on the exercise of judgement. In this context, the undertaking shall disclose an estimation of the potential effects of its principal transition risks in relation to (i) the potential future financial position in terms of assets and liabilities and (ii) the potential future financial performance in terms of revenues and costs and explain the methodologies applied and critical assumptions made.

Calculation rules

AG78. When disclosing the information regarding the potential future effects on assets, the undertaking shall at least include an estimation of the amount of potentially stranded assets (in monetary unit). Stranded assets are understood as currently owned or operated assets of the undertaking with significant potential to have their lifetime

shortened due to the biodiversity and ecosystems-related transition. The amount may be expressed as a range of net asset value based on different transition scenarios.

- AG79. The disclosure of financial exposure shall be completed by a description of the methodologies and definitions used by the undertaking, including at least, the scope of application, the methodology assumptions and limitations, the scenario analyses that were conducted and the critical parameters used.
- AG80. When disclosing the information regarding the potential future financial performance, the undertaking shall include a description of how it may be affected by biodiversity and ecosystems-related transition risks in terms of the turnover related to its business activities. Even if no detailed calculation rules are generally agreed-upon, there is a market convergence on existing methodologies to consider the following steps:
- screening of the activities to identify on the one side significantly harmful activities with regards to biodiversity and ecosystems that are unable by nature to transition and on the other side those considered as significantly harmful to biodiversity and ecosystems but that have options available to transition to activities which are less impactful to biodiversity and ecosystems. This screening shall be science-based;
 - mapping of the activities through the lens of transition risk events taking into consideration their likelihood, magnitude and duration according to selected scenario analyses. This mapping shall be carried out by using the following events (not comprehensive) list: increased external pricing of rights to access biodiversity and ecosystems due to policy changes; increased costs due to regulation or substitution of existing products and services; loss of revenues due to technological innovation; increase of operating costs due to a shift of market demand for certain commodities, product or services ; loss due to litigation, loss of revenue due to shift in customer preferences or change in community perception of the company, etc.
- AG81. The business activities exposed to transition risks resulting in margin erosion shall be disclosed as an estimated share of revenues from business activities (or operating segment) and shall be completed by a description of the methodologies and definitions used by the undertaking, including at least the scope of application, the methodology assumptions and limitations, if and how scenario analyses were applied, and critical parameters used.
- AG82. The undertaking may use the table below to present the information:

Transition risks	Potential financial impact	N	Estimated range in future years	Comment
Policy and legal				
- Increased pricing of rights to biodiversity and ecosystems	Increased operating costs (e.g., higher compliance costs, increased insurance premiums)			
- Enhanced reporting obligations	Write-offs, asset impairment, and early retirement of existing assets due to policy changes			
- Mandates on and regulation of existing products and services				
- Exposure to litigation	Increased costs and/or reduced demand for products and services resulting from fines and judgments			
Technology				

- Substitution of existing products and services with less use of biodiversity and ecosystems - Unsuccessful investment in new technologies - Costs to transition to less biodiversity and ecosystems intensive technology	Write-offs and early retirement of existing assets			
	Reduced demand for products and services			
	R&D expenditures in new and alternative technologies			
	Capital investments in technology development			
	Costs to adopt/deploy new practices and processes			
Market				
- Changing customer behaviour - Uncertainty in market signals - Increased cost of raw materials	Reduced demand for goods and services due to shift in consumer preferences			
	Increased production costs due to changing input prices (e.g., energy, water) and output requirements (e.g., waste treatment)			
	Abrupt and unexpected shifts in the cost of biodiversity and ecosystems			
	Change in revenue mix and sources, resulting in decreased revenues			
	Re-pricing of assets (e.g., fossil fuel reserves, water rights valuations, ...)			
Reputation				
- Shifts in consumer preferences - Stigmatization of sector - Increased stakeholder concern or - negative stakeholder feedback	Reduced revenue from decreased demand for goods/services			
	Reduced revenue from decreased production capacity (e.g., delayed planning approvals, supply chain interruptions)			
	Reduced revenue from negative impacts on workforce management and planning (e.g., employee attraction and retention)			
	Reduction in capital availability			

Connectivity with financial reporting

AG83. For the net stranded assets, the reconciliation to the most relevant amount presented in the financial statements shall be structured as follows:

- (a) The undertaking should include a cross-reference to the related line item in the financial statements.
- (b) If it can't be directly cross-referenced to a line item in the financial statements, the undertaking should provide a quantitative reconciliation table between [the net current assets value as required in 'Financial exposure to transition risks' and financial statements. The undertaking may use the format of the table for reconciliation shown below:

Net current assets value used to calculate the current assets exposed to transition risks ('Financial exposure to transition risks')	
Net current assets value (other)	
Net current assets value (Financial statements)	

[Optional Disclosure Requirement 19] – Financing biodiversity and ecosystems mitigation projects outside of the undertaking's value chain

AG84. The undertaking shall indicate if the offsets occurred after all previous steps in the mitigation hierarchy have been considered and no alternatives are available.

AG85. The undertaking, when disclosing the type of offsets, shall consider the following:

- (a) averted-loss – conservation projects that conserve threatened biodiversity values, which may include creating new protected areas and, in some cases, supporting existing but highly threatened protected areas, or;
- (b) restoration – conservation projects that restore biodiversity values, and in some cases enhance or create new habitat.

AG86. The undertaking shall disclose if the offsets it has purchased follow a set of generally accepted principles for offset design³⁷:

- (a) Follow the mitigation hierarchy – Offsets are not intended to relieve project developers of performing other types of mitigation;
- (b) Offsets should support landscape-level conservation – Offsets should be designed considering the ecological processes and functions of the landscape;
- (c) Offsets must provide additionality – Only the gains in biodiversity that would not have occurred in the absence of a conservation project qualify as a 'biodiversity offset'. The offset must not duplicate or replace an existing and adequately functioning restoration or conservation project;
- (d) Achieving no net loss or net gain requires adequate scale – Offsets should generate biodiversity gains (additionality) commensurate with the impacts of the project. In some cases, the scale of the offset may be expanded in size to accommodate uncertainties in design and expected effectiveness;
- (e) In-kind (like-for-like) vs. out-of-kind (trading up) – An offset typically seeks to generate benefits for the biodiversity value(s) impacted by a project. Offsets with these characteristics are known as 'in-kind' or 'like-for-like' offsets. Sometimes, however, it may be desirable to implement an offset that restores or conserves a biodiversity value of greater conservation value than that which is to be impacted

³⁷ Source : http://bbop.forest-trends.org/documents/files/bbop_principles.pdf

by the project. For example, if a project impacts very common natural habitat in the landscape, it may be desirable to 'trade up' to an offset that conserves a more rare and/or threatened habitat that has been identified as a priority for conservation. Such an 'out-of-kind' offset should only be implemented after appropriate consultation with conservation stakeholders to ensure both its technical validity – that the offset is genuinely of greater conservation value, and its public acceptance – that stakeholders view the offset as greater in perceived value.

- (f) Stakeholder participation fortifies offset design – Entities with responsibilities and interests related to biodiversity conservation and the human welfare impacts (both positive and negative) of land use decisions should be engaged in the biodiversity offset planning process. A sample list of stakeholders might include: environmental regulators; conservation organizations operating in the area; and local communities that may be affected by either losses of biodiversity that the offset seeks to replace, or loss of land or resources due to the implementation of the offset.

AG87. Offsets' benefits should endure as long as project impacts – Offsets require sustained management to ensure that the benefits endure over time. To achieve such continuity, it is recommended to ensure legal protection of offset areas and secure funding to manage the offset for its entire design life. Offset design should be integral to conservation planning and other land use planning in the project landscape. This may mean that in locations where the public sector has prioritized areas for conservation through a robust scientific and consultative process, 'trading up' may be the most logical and preferable option, as it should in theory assist in achieving the most important objectives of the region's conservation plan. In jurisdictions where offsets are regulated or becoming common due to lender and corporate standards, the concept of 'aggregated offsets' may be used to achieve large-scale conservation goals by joining the offset obligations of multiple companies into a single large conservation project. In locations where conservation planning is less developed, there is a weaker context both for 'trading up' as well as determining the optimal design for the offset in other regards. In these cases, consultation with experts and organizations with experience in the area may play a valuable role in assisting with the offset's design. Project proponents are advised to contract specialists with experience in designing offsets that meet international standards and to work with government and local conservation organizations that have sufficient local knowledge and the ability to set up and manage successful conservation projects that will serve as an offset.

Basis for conclusions

Context

BC1. This [draft] Basis for conclusions accompanies but is not part of [draft] ESRS E4 Biodiversity and Ecosystems. It summarises the considerations and references of the [EFRAG Sustainability Standards Board (the 'Board')] in developing the contents of the [draft] standard. Individual Board members may be giving greater weight to some factors than to others.

Approach to drafting the standard

BC2. The approach which led to drafting this proposal, was divided into five phases.

BC3. Phase 1 (top-down approach):

- (a) Possible treaties, conventions, international frameworks, EU directives and other documents which contained clearly enunciated policy goals for biodiversity and ecosystems, were identified. An initial collection of documents leads provided during informal expert consultations, research on the internet and on the EAA's search engines were used to make sure the list was as comprehensive as possible. An emphasis was made on documents that either had an international (global) perspective and/or an EU one. Documents that concerned specifically other geographical zones with no global outreach were left aside.
- (b) These documents were analysed, the policy goals were listed and then clustered so that similar policy goals emanating from different sources would be formulated as the same policy goal. Whenever relevant, any indicators related to these goals that might be adaptable to a corporate level were identified.
- (c) These goals are listed below, in a subsequent section of this document.
- (d) The same documents were reviewed in order to identify other aspects which could be important, in terms of materiality and relevancy, for the disclosures. These other materiality and relevancy issues are also listed below, for the reader's consideration.

BC4. Phase 2 (bottom-up approach):

- (a) Recommended corporate disclosures (Key Performance Indicators, KPIs) were identified and described based on existing global frameworks. For example, the work of the GRI, CDP Forest, CDSB Application Guidance for Biodiversity Disclosures were considered. A dedicated common KPI database was used, and completed by recent work and additional topic specific additional guidance, frameworks and KPI lists.

BC5. Phase 3 (assessment and clustering of possible KPIs):

- (a) A specific spreadsheet with a tab for each of the sections of the common PTF-ESRS standard template (strategy and business model, impacts, risks & opportunities, governance...) was created.
- (b) Each of the disclosures in the KPI database and decided to which topic (ecosystems, biological diversity, social) and to which tab each KPI belonged, was analysed. Once that was done, each KPI to assess its relevance and quality for the proposal, its time focus (retrospective or forward looking) and its materiality (financial, impact or double), was reviewed. Groups of similar KPIs were identified.

BC6. Phase 4 (identification of items):

- (a) Considering the list of existing KPIs for each section of the standard, a list of KPIs for each section was created. Finally, proposed disclosures were verified for consistency with:
 - (i) the requirement of the draft CSRD;
 - (ii) the existing NFRD and its 2017 and 2019 implementation guidelines;
 - (iii) the global and EU related biodiversity and ecosystems goals identified in phase 1.

BC7. Phase 5 (consultation with experts):

- (a) Work in progress was submitted and feedback received on a regular basis from experts from observer organizations ESMA, EIB, ECB, EEA and from the Platform on Sustainable Finance (EU Taxonomy).
- (b) Work in progress was discussed in short meetings with external experts without a formalized role within the process, and with no access to documents. 9 short meetings with experts were organized in September (3) and November (6).
- (c) Thanks to the statement of cooperation with the GRI, we participated in 16 meetings with experts in conjunction with the GRI's work in revising their own biodiversity standard. Through a common interview questionnaire, these meetings allowed us to gain multistakeholder input on biodiversity and ecosystems disclosures.
- (d) Work in progress was discussed in two meetings with DG Environment.

BC8. These different phases provided us with the following elements as a rationale for choosing disclosure requests:

BC9. Biodiversity and climate change are intertwined issues, as per the co-organized workshop between IPBES and IPCC "Unprecedented changes in climate and biodiversity, driven by human activities, have combined and increasingly threaten nature, human lives, livelihoods and well-being around the world. Biodiversity loss and climate change are both driven by human economic activities and mutually reinforce each other. Neither will be successfully resolved unless both are tackled together." (IPBES, 2021)³⁸. In conjunction with scientific knowledge progress, two significant global initiatives are mirroring existing climate change frameworks and science-based targets for biodiversity: the Taskforce for Nature Financial-related Disclosures (TNFD) and the Science-based targets for Nature (SBTN). In addition, the CDSB issued Application guidance for biodiversity-related disclosures in 2021.

BC10. Biodiversity is a systemic issue. SBTN (2020) introduced in their action framework a fourth step called "transform" (transform underlying systems, at multiple levels, to address the drivers of nature loss), and TNFD (2021) added a category of "systemic risks" related to nature.

BC11. Biodiversity is a local impact, and therefore, there are two appropriate disclosure pathways: through geographical locations of sites, and through geographical locations of raw materials.

BC12. Biodiversity and ecosystems disclosures are being approached via dependencies, impacts and biodiversity loss impact drivers.

BC13. Pressures on biodiversity and ecosystems (or key biodiversity loss impact drivers) originate from five key categories of impact drivers defined by the IPBES which are: land-use or habitat change, climate change, pollution, natural resource use and exploitation, as well as invasive species and are partly covered by other standards.

BC14. The mitigation hierarchy is key to categorizing policies, targets and actions.

BC15. Biodiversity and ecosystems metrics can be separated in two groups: species and ecosystems' metrics, and can be categorized using the pressure-impact/state-response framework.

BC16. Biodiversity and social issues are intertwined, especially when talking about genetic resources and traditional knowledge. Therefore, we included, where relevant, disclosures pertaining to the interaction between local and indigenous communities and biodiversity.

BC17. The whole value chain (including supply chain, operations, products and services sold and used) is considered material.

Scope

BC18. The Draft Standard ESRS E4 and this document cover disclosure proposals related to terrestrial, freshwater and marine habitats, ecosystems and populations of related fauna and flora species, this includes diversity within species, between species and of ecosystems as defined by the Convention on Biological Diversity (CBD) and their interrelation with many indigenous and local communities (CBD, 1992, Kunming Declaration, 2021).

³⁸ <https://www.ipbes.net/events/ipbes-ipcc-co-sponsored-workshop-report-biodiversity-and-climate-change>

- BC19. For the purpose of the (Draft) Standard, “Biological diversity” means the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part: this includes diversity within species, between species and of ecosystems (CBD, 1992).
- BC20. We acknowledge “the intrinsic value of biological diversity and of the ecological, genetic, social, economic, scientific, educational, cultural, recreational and aesthetic values of biological diversity and its components” (CBD, 1992).
- BC21. We emphasize, like the Science Based Target for Nature Initiative that “some consequences of human impacts are irreversible. Species extinction, release of carbon stored in peatlands, extraction of fossil water, and destruction of culturally significant sites create impacts that cannot be restored or regenerated on a meaningful timescale; they can only be avoided. To stay within Earth’s limits and ensure a future where people from all cultures can thrive, some impacts must be avoided”. (p.44, 2020)
- BC22. We highlight the critical importance of disclosure on the value chain, including outside of Europe, in accordance to the EU Biodiversity Strategy for 2030, Pillar 4 (“EU Action to Support Biodiversity Action Globally: Deploy EU external actions to raise the level of ambition for biodiversity worldwide, reduce the impact of trade and support biodiversity outside Europe”)
- BC23. Biodiversity and ecosystems are affected at regional or local level and context. At the same time, supply chains are a global impact of pressures and responses. The EU’s approach to managing the conservation and restoration of ecosystems and biological diversity in the EU and globally through EU supply chain levers, is based on local ecosystems and habitats and their connectivity as well as their state in terms of ability to provide ecosystem services and natural resource resilience / ability to renew and to maintain a sustainable level. For example, the EMAS and Biodiversity Guidelines (2016) emphasize the critical role of the purchasing department in managing negative impacts and developing solutions: “With the exception of businesses in the primary sector, the main negative effects on biodiversity caused by businesses are usually associated with their supply chains. This may take the form of deforestation to obtain agricultural land, mining to extract raw minerals, the construction of a hotel in an area of high ecological value, the planting of monoculture forests for paper and furniture production or the harvesting of wild plants from their natural habitats to obtain medical active substances: almost all raw materials and (intermediate) products procured by the purchasing department of a business are in some way associated with biodiversity-related environmental effects. A business’s procurement division is thus an important corporate interface at which measures to improve environmental biodiversity performance can be introduced. But not only will the reduction of negative effects contribute to this. Wherever the existence of natural habitats and ecosystems is threatened, for example as a result of overexploitation due to a lack of alternative income sources for local population groups, it has been shown that the sustainable use of biodiversity can create strong incentives to maintain such environments.” Moreover, the Science Based Target for Nature Initiative states that “for many companies, the largest impacts and greatest opportunities for action will take place in their value chains, and thus relationships with suppliers and other value chain partners are a key consideration” (p.30, 2020).
- BC24. We note “that it is vital to anticipate, prevent and attack the causes of significant reduction or loss of biological diversity at source”, notes further “that the fundamental requirement for the conservation of biological diversity is the in-situ conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species in their natural surroundings”, and finally notes “further that ex-situ measures, preferably in the country of origin, have an important role to play” (CBD, 1992).
- BC25. We, following the CBD (1992) are “aware that conservation and sustainable use of biological diversity is of critical importance for meeting the food, health and other needs of the growing world population, for which purpose access to and sharing of both genetic resources and technologies are essential”. The Kunming Declaration (October 2021) acknowledges further “with grave concern that the unprecedented and interrelated crises of biodiversity loss, climate change, land degradation and desertification, ocean degradation, and pollution, and increasing risks to human health and food security, pose an existential threat to our society, our culture, our prosperity and our planet”.

BC26. The main direct drivers of biodiversity loss are recognized to be land/sea use change, overexploitation, climate change, pollution and invasive alien species (Kunming Declaration, October 2021), and therefore will drive reporting of strategy, plans, actions & resources. According to the Cancun Declaration (2016), Cluster 3 acknowledges concerns in relation to the negative impacts on biodiversity caused by degradation and fragmentation of ecosystems, unsustainable land use changes, overexploitation of natural resources, illegal harvesting and trade of species, introduction of invasive alien species, pollution of air, soil, inland waters and oceans, climate change and desertification.

BC27. We recognize the close and traditional dependence of many indigenous and local communities embodying traditional lifestyles on biological resources, and the desirability of sharing equitably benefits arising. (CBD, 1992) and acknowledges “that indigenous peoples and local communities contribute to the conservation and sustainable use of biodiversity through the application of traditional knowledge, innovations and practices, and through their stewardship of biodiversity on their traditional lands and territories” (Kunming Declaration, October 2021).

BC28. We highlight the necessity to support sustainable production and consumption throughout the value chains (Cancun Declaration, 2016).

The status of biodiversity and ecosystems

BC29. Biodiversity and ecosystems are the fundamental infrastructure that supports all forms of life on Earth. They are essential not only for the provision of all natural services, but also for underpinning economic growth and sustainable development (Sharm El-Sheikh Declaration, 2018). Additionally, according to the Sharm El-Sheikh Declaration (2018), human health depends on biodiversity in multiple ways, and that the loss of biodiversity and ecosystem services negatively impacts human health.

BC30. The Kunming Declaration (October 2021) is concerned that the ongoing loss of biodiversity jeopardizes achievement of the Sustainable Development Goals and other international goals and targets, and acknowledges with grave concern that the unprecedented and interrelated crises of biodiversity loss, climate change, land degradation and desertification, ocean degradation, and pollution, and increasing risks to human health and food security, pose an existential threat to our society, our culture, our prosperity and our planet.

BC31. The 2020 IPBES global report³⁹ finds that:

- (a) Humanity is now a dominant influence on nature worldwide, with many impacts having accelerated rapidly in the 20th century;
- (b) Much of nature has already been lost, and what remains is continuing to decline;
- (c) The degree of transformation of ecosystems from natural to human-dominated varies widely across terrestrial, inland water and marine systems, and geographically within many systems. Over 30% of the world’s land is now agricultural or urban, with ecosystem processes deliberately redirected from natural to anthropogenic pathways. Human drivers extend so widely beyond these areas that as little as 13% of the ocean and 23% of the land is still classified as “wilderness” – and these areas tend to be remote and/or unproductive (e.g., tundra, oceanic gyres);
- (d) Globally, the net rate of loss of forests that are not managed for timber or agricultural extraction has halved since the 1990s, but declines continue in the tropics; and intact forest landscapes – large areas of forest or natural mosaic with no human-caused alteration or fragmentation detectable by satellites – are still being lost from both high and low income countries;
- (e) Hotspots of rare and endemic species have on average suffered more degradation of ecosystem structure and biotic integrity than other areas, despite their importance for global biodiversity;
- (f) Human actions threaten more species with global extinction now than ever before: extrapolating from detailed ‘bottom-up’ assessments of species in the best studied

³⁹ [Global Assessment Report on Biodiversity and Ecosystem Services | IPBES secretariat](#)

taxonomic groups suggests that around one million animal and plant species already face extinction, and that a third of the total species extinction risk to date has arisen in the last 25 years;

- (g) A 'top-down' analysis of the number of species for which sufficient habitat remains suggests that as many as half a million terrestrial species of animal and plant may already be doomed to extinction because of habitat loss and deterioration that have already taken place;
- (h) Transformation of ecosystems to increasingly intensive human use has enabled a small fraction of species to greatly expand their distribution and increase in abundance;
- (i) Human actions are driving widespread changes in organismal traits and reductions in genetic diversity incomplete. Many species are evolving rapidly as they adapt to human drivers of change, including some changes – such as resistance to antibiotics and pesticides – that pose serious risks for society, which evolutionary-aware policy decisions and strategies can mitigate;
- (j) The global loss of forests, rates of species extinction, and average losses of originally-present biodiversity from terrestrial ecological communities all transgress proposed precautionary 'Planetary Boundaries';
- (k) Land-use change has had the largest relative negative impact on nature for terrestrial and freshwater ecosystems, mainly through habitat loss and degradation; whereas in marine ecosystems, direct exploitation of organisms (mainly fishing) has had the largest relative impact, followed by land/sea-use change. The multiple components of climate and atmospheric change (e.g., changing temperature, rainfall and atmospheric CO₂ levels as well as ocean acidification) are already significant drivers of change in many aspects of nature but are not usually the most important drivers at present;
- (l) The world's major ecosystems vary in both the intensity of drivers they face and their ability to withstand them, with some close to potential collapse;
- (m) Many practices of Indigenous Peoples and Local Communities (IPLCs) conserve and sustainably manage, wild and domesticated biodiversity. A high proportion of the world's terrestrial biodiversity lives in areas managed and/or held by Indigenous Peoples, where ecosystems and ecological communities tend to be more intact and declining less rapidly than elsewhere;
- (n) Indigenous Peoples and Local Communities report that the nature important to them is mostly declining: among the local indicators developed and used by Indigenous Peoples and Local Communities, 72 per cent show negative trends in nature that underpin local livelihoods and well-being, which they mainly attribute to land-use change and climate change; the relative importance of these drivers varies among regions and major ecosystem types;
- (o) Whereas scientific observations on the status of nature have for centuries been valued, systematically recorded, retained and synthesized in scientific outputs, indigenous and local knowledge of nature has been largely disregarded, is still being lost, and has rarely been synthesized;
- (p) This global assessment has been able to make use of much more, better, more comprehensive and more representative information than was available even a decade ago. Though uncertainties and gaps in knowledge remain, there can be no doubt that nature is continuing to decline globally in response to direct human-caused drivers.

BC32. In its "State of nature in the EU" report⁴⁰, covering results from the reporting under the nature directives 2013-2018, the European Environment Agency finds that 1) climate change is rising threat, especially due to droughts and lower precipitation, 2) near half of the bird species have a 'good' population status, but farmland birds show least improving trends, 3) illegal killing and hunting are the biggest overall pressures for migratory birds, 4) habitats

⁴⁰ [State of nature in Europe: a health check — European Environment Agency \(europa.eu\)](https://www.eea.europa.eu/en/state-of-nature-in-europe-a-health-check)

important for pollinators have a worse conservation status and trends than other habitats, 5) agricultural activities (and abandonment) and urbanisation are the major pressures for habitats and species, followed by pollution, 6) only 14% of habitats assessments and 27% of non-bird species have 'good' conservation status, 7) forests show most improving trends and grasslands, dunes and bogs the most deteriorating trends, 8) Natura 2000 sites cover 18% of land and 10% of marine waters in the EU, and 9) status and trends of marine species and habitats remain largely unknown.

BC33. In its report "The European environment - state and outlook 2020"⁴¹, the European Environment Agency concludes the following past trends and outlook:

TABLE ES.1 Summary of past trends, outlooks and prospects of meeting policy objectives/targets

Theme	Past trends and outlook		Prospects of meeting policy objectives/targets		
	Past trends (10-15 years)	Outlook to 2030	2020	2030	2050
Protecting, conserving and enhancing natural capital					
Terrestrial protected areas					
Marine protected areas					
EU protected species and habitats					
Common species (birds and butterflies)					
Ecosystem condition and services					
Water ecosystems and wetlands					
Hydromorphological pressures					
State of marine ecosystems and biodiversity					
Pressures and impacts on marine ecosystems					
Urbanisation and land use by agriculture and forestry					
Soil condition					
Air pollution and impacts on ecosystems					
Chemical pollution and impacts on ecosystems					
Climate change and impacts on ecosystems					
Indicative assessment of past trends (10-15 years) and outlook to 2030		Indicative assessment of prospects of meeting selected policy objectives/targets			
Improving trends/developments dominate	Year		Largely on track		
Trends/developments show a mixed picture	Year		Partially on track		
Deteriorating trends/developments dominate	Year		Largely not on track		

Note: The year for the objectives/targets does not indicate the exact target year but the time frame of the objectives/targets.

Global and EU biodiversity and ecosystem goals

BC34. This [draft] standard aims at harnessing the efforts of business organizations towards achieving the four pillars of the EU Biodiversity Strategy 2030:

- Protect Nature: Expand protected areas to 30% of the EU's land and sea, and put a third of these areas under strict protection
- Restore Nature: Restore nature and ensure its sustainable management across all sectors and ecosystems
- Enable Transformative Change: Strengthen the EU biodiversity governance framework, knowledge, research, financing and investments
- EU Action to Support Biodiversity Action Globally: Deploy EU external actions to raise the level of ambition for biodiversity worldwide, reduce the impact of trade and support biodiversity outside Europe

BC35. In addition, and according to global conventions and EU policies (regulations, directives, strategies, initiatives, etc.) this [draft] standard aims at harnessing the efforts of business organizations towards achieving the main policy targets in relation to biodiversity and ecosystems, which can be summarized as (please see *Appendix 2 "Global and EU goals and targets"* for reference):

- Halt desertification, restore degraded land and soil, including wetlands and land affected by desertification, drought and floods, and strive to achieve a land

⁴¹ [The European environment — state and outlook 2020: knowledge for transition to a sustainable Europe — European Environment Agency \(europa.eu\)](https://www.eea.europa.eu/en/press/2020/06/06)

degradation-neutral world, and reach land degradation neutrality by 2030, at least 30% of species and habitats not currently in favourable status are in that category or show a strong positive trend, and significant areas of degraded and carbon-rich ecosystems are restored.

- (b) Ensure that at least 30 per cent globally of land areas and of sea areas, especially areas of particular importance for biodiversity and its contributions to people, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes; At least 30% of the land and 30% of the sea are protected in the EU by 2030; Reduce the rate of land take, urban sprawl and sealing to achieve no net land take by 2050.
- (c) Strive to end natural forest loss by 2030, bring 350 million hectares of deforested and degraded land into restoration, including planting at least 3 billion additional trees in the EU by 2030, in full respect of ecological principles by 2030, and strictly protect at least a third of the EU's protected areas, including all remaining EU primary and old-growth forests. Achieve 55-75% of total area of forested land, whereof 60-85% tropical and boreal forest, in line with planetary boundaries.
- (d) Ensure all areas under agriculture, aquaculture and forestry are managed sustainably, in particular through the conservation and sustainable use of biodiversity, increasing the productivity and resilience of these production systems, and promote sustainability in agriculture by eliminating deforestation in relation to agricultural commodities, and by working in partnership with consumer and producer countries and with all actors along the supply chains to this end.
- (e) At least 25% of the EU's agricultural land must be organically farmed by 2030, and bring back at least 10% of agricultural area under high-diversity landscape features, protect soil fertility, reduce soil erosion and increase soil organic matter.
- (f) Conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands by 2020. Restore wetlands globally to offer 14 percent of the mitigation potential needed to limit global warming by 2 degrees by 2030.
- (g) By 2030, achieve the sustainable management and efficient use of natural resources, with all businesses (public and private, large, medium and small) assess and report on their dependencies and impacts on biodiversity, from local to global, and progressively reduce negative impacts, by at least half and increase positive impacts, reducing biodiversity-related risks to businesses and moving towards the full sustainability of extraction and production practices, sourcing and supply chains, and use and disposal.
- (h) Contribute towards ensuring biodiversity through the conservation of natural habitats and of wild fauna and flora in the European territory of the Member States, and establish the world's largest network of protected areas under Natura 2000 and any other EU and Member State protection/classification schemes.
- (i) Stop the degradation of natural habitats, halt the loss of biodiversity and protect and prevent the extinction of threatened species, with a decrease in the proportion of species that are threatened, and the abundance and distribution of populations of species is enhanced or at least maintained.
- (j) Save 1 million animal and plant species currently threatened with extinction and the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained. The decline in pollinators is reversed.
- (k) End poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products, and ensure that the harvesting, trade and use of wild species is sustainable, legal, and safe for human health.
- (l) Ensure active management actions to enable the recovery and conservation of species and the genetic diversity of wild and domesticated species, including through ex situ conservation, and effectively manage human-wildlife interactions to avoid or reduce human-wildlife conflict.

- (m) Genetic diversity of wild and domesticated species is safeguarded, with an increase in the proportion of species that have at least 90 per cent of their genetic diversity maintained.
- (n) Prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species, with the aim to manage established invasive alien species and decrease the number of Red List species they threaten by 50%.
- (o) Protect the rights of local communities considering their traditional knowledge, innovations and practices. Protect the rights of indigenous people, involving them in the decision-making process related to biodiversity which ensures their free, prior, and informed consent.
- (p) Ensure benefits, including nutrition, food security, medicines, and livelihoods for people especially for the most vulnerable through sustainable management of wild terrestrial, freshwater and marine species and protecting customary sustainable use by indigenous peoples and local communities.
- (q) Improve awareness and knowledge of values of biodiversity and related science base and technologies also regarding pollinator decline.
- (r) Mobilize financial resources for the Strategic Plan for Biodiversity 2011-2020 from all sources, integrate green infrastructure (GI), including nature-based solution, into key policy areas and eliminate incentives, including subsidies, harmful to biodiversity.

Objective of the [draft] standard

BC36. The objective of this [draft] standard is to set out the Disclosure Requirements related to biodiversity and ecosystems which will enable users of sustainability reporting understand:

- (a) to what extent the undertaking contributes to the European Green Deal's⁴² ambitions for protecting the biodiversity and ecosystems, the EU Biodiversity Strategy for 2030⁴³, the SDG 12, 14 and 15⁴⁴, the Post-2020 Global Biodiversity Framework⁴⁵;
- (b) to what extent the undertaking contributes to the respect of global environmental limits (e.g. the biosphere integrity & land-system change planetary boundaries⁴⁶);
- (c) the dependencies and the positive and negative impacts of the undertaking on biodiversity and ecosystems, and its past, current and future measures to protect them;
- (d) the nature, type and extent of risks and opportunities arising from the undertaking's actions on biodiversity and ecosystems;
- (e) the biodiversity and ecosystems-related risks, opportunities and dependencies, in relation with the undertaking's activities, and their consequences for the undertaking's financial situation and performance over the short-, medium- and long-term
- (f) and the plans and capacity of the undertaking to adapt its business model and operations in line with the transition to a sustainable economy and with the preservation and restoration of biodiversity and ecosystems globally.

⁴² The European Green Deal can be found here : https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en

⁴³ The EU Biodiversity Strategy for 2030 can be found here : https://ec.europa.eu/environment/strategy/biodiversity-strategy-2030_en

⁴⁴ SDG 12 pertains to Responsible Consumption and Production, SDG 14 pertains to Life Below Water and SDG 15 to Life on Land. More information can be found here : <https://sdgs.un.org/goals>

⁴⁵ The Post 2020 Global Biodiversity Framework is designed by the Secretariat of the UN Convention on Biological Diversity (CBD) to guide actions worldwide through 2030, to preserve and protect nature and its essential services to people: <https://www.cbd.int/article/draft-1-global-biodiversity-framework>

⁴⁶ A description of the nine planetary boundaries can be found here : <https://www.stockholmresilience.org/research/planetary-boundaries/the-nine-planetary-boundaries.html>

Specific biodiversity and ecosystems resources disclosures on strategy

Why disclose on Business strategy on biodiversity and ecosystems?

EU legislation and recommendations

BC37. The Non-Financial Reporting Directive¹ ('NFRD') requires that undertakings disclose information about their business strategy and the resilience of the business model and strategy to risks related to sustainability matters.

BC38. In the European Commission's proposal for a Corporate Sustainability Reporting Directive² ('CSRD'), Article 19a (2) asks undertakings to report on the business model and strategy, including:

- (a) "the resilience of the undertaking's business model and strategy to risks related to sustainability matters";
- (b) "the opportunities for the undertaking related to sustainability matters";
- (c) "the plans of the undertaking to ensure that its business model and strategy are compatible with the transition to a sustainable economy and with the limiting of global warming to 1.5 °C in line with the Paris Agreement";
- (d) "how the undertaking's business model and strategy take account of the interests of the undertaking's stakeholders and of the impacts of the undertaking on sustainability matters";
- (e) how the undertaking's strategy has been implemented with regard to sustainability matters."

BC39. According to the EMAS and Biodiversity 2016 Guidelines "Every business should develop a biodiversity strategy and pursue it over the long term."

BC40. The EU Taxonomy Regulation establishes the overarching framework that allows to classify economic activities as environmentally sustainable. Article 8 of the Taxonomy Regulation and the related Delegated Act require undertakings under the scope of the NFRD/CSRD to report a share of turnover, capital expenditures and operating expenditures from taxonomy eligible, and taxonomy aligned activities, which – when monitored over time – could be considered as a measure of how an undertaking progresses in the transition to an economy that can be deemed sustainable regarding biodiversity and ecosystems issues.

Global reporting frameworks

BC41. The CDSB Application Guidance on Biodiversity-related disclosures suggests the following disclosure "Policies and Strategies": Organisations should outline policies, strategies and public commitments to protect, restore or sustainably use biodiversity. Report users should be able to understand how identified risks and opportunities are reflected in the organisation's strategic development and how they affect biodiversity-related ambitions". The Application Guidance also emphasizes the need to understand how strategies are integrated in the overall business strategy and management and how they are developed in connection to important agreements, policies or targets. "Where biodiversity strategies/policies are included in or interact with other environmental or social policies, report preparers should draw users' attention to potential or existing synergies or trade-offs, explaining the benefits and/or feedbacks (e.g. effects of climate change)".

BC42. The CDSB application guidance also emphasizes the role of transitioning to a biodiversity-positive economy and its financial implications on the undertaking.

BC43. The CDSB Application Guidance also emphasizes in "outlook" the necessity to conduct scenario analysis for biodiversity: "Assessing a range of future biodiversity-related states and consequences for the business will elicit important information for companies and report users. Scenario analysis can be conducted through different routes including consultation with internal and external experts or scientific analysis, which would support the understanding of complex and interconnected biodiversity-related issues. It can be a quantitative or qualitative exercise. (...) it is a process to analyse a suite of potential futures, understanding the organisation, its dependencies and strategic resilience, within the different forces that drive each of the futures. It is an advanced exercise because it would,

ideally, consider a set of drivers influencing the status of biodiversity, ecosystems and their functioning/services in the different areas of operations and value chain, including drivers linked to business operations, as well as external drivers such as population, regulatory mechanisms, land-use change, and climate change and its effects (e.g. ocean acidification)."

- BC44. The SASB Standards recommend that companies disclose the entity's strategic approach regarding actual and potential impacts of topic-related risks and opportunities on the organisation's businesses, strategy, and financial planning, over the short-, medium-, and long-term. Each industry specific SASB Standard includes biodiversity-related risks and opportunities that are likely to be material in a given industry.
- BC45. The Integrated Reporting (IR) Framework recommends reporting on the company's short-, medium- and long-term strategic objectives, the strategies it has in place, or intends to implement, to achieve those strategic objectives, the resource allocation plans it has to implement its strategy and how it will measure achievements and target outcomes for the short-, medium- and long-term. The IR framework defines a company's business model as its system of transforming inputs, through its business activities, into outputs and outcomes that aims to fulfil the organization's strategic purposes and create value over the short-, medium- and long-term.
- BC46. GRI 2 "general disclosures" requests the report of a statement from the highest governance body or most senior executive on the relevance of sustainability to the organisation, and on its strategy for addressing sustainability.
- BC47. The Biodiversity Guidance from the Capitals Coalition underlines that "Business models and activities that promote biodiversity can present an opportunity for enhancement of natural capital stocks." (p.18)
- BC48. The Science-based target initiative for Nature (2020) emphasizes the role of the transition to what they call a "nature –positive future": "ensuring equal opportunities for societies to sustain a decent living and to access the benefits of the transition toward a zero emission, nature-positive future". They reiterate saying "we as a society must begin to transition or transform entirely the systems that give structure to our world".
- BC49. The TNFD Technical Scope (2021) also emphasizes risks and opportunities linked to "a transition to an economy consistent with meeting future nature-related international agreements such as the UN Convention on Biological Diversity (CBD) and the ambitions set out in its forthcoming Post-2020 Global Biodiversity Framework".

Users' needs

- BC50. Stakeholders need to understand how the undertaking defines its strategy and business model in a manner that:
- (a) reduces its total impact on biodiversity and ecosystems;
 - (b) is consistent with global and EU policy objectives for biodiversity and ecosystems;
 - (c) is resilient to the potential impacts of biodiversity and ecosystem-related risks;
 - (d) can take opportunities into account which will rise from satisfying the needs of stakeholders.

Conclusions

- BC51. In order to be able to create value over the mid-and long-term, undertakings need to ensure that their business model and strategy is compatible with the transition to a sustainable economy and with the preservation and restoration of biodiversity and ecosystems globally. Therefore, undertakings should report on the transition plans they have in place, in line with the targets of no net loss by 2030 and net gain by 2050.
- BC52. In addition, it is important that undertakings create transparency on how biodiversity and ecosystems-related risks and opportunities can affect their business models and strategies, how resilient the current business model of an undertaking is towards biodiversity and ecosystems-related risks and how it causes and drives adverse or positive impacts on biodiversity and ecosystems.

- BC53. The materialisation of biodiversity and ecosystems-related risks greatly differs among entities depending, among others, on the type of their activities and business relationships and the location of their assets. Despite entity-specific differences, all undertakings will face the need to assess how biodiversity and ecosystems-related dependencies and impacts can affect them, to test their current business models and practices against physical and transition risks, as well as the need to develop plans of how to be part of the transition ahead. In conclusion, undertaking will have to be transparent on where they stand in these regards.
- BC54. To appropriately incorporate the potential effects of biodiversity and ecosystems in their strategic decision making, companies should consider how biodiversity and ecosystems-related risks and opportunities may evolve over time and what their potential business implications are under different conditions. For this purpose, biodiversity and ecosystems-related scenario analysis is a highly useful approach. However, for many undertakings it is a new concept that brings along methodological and operational challenges. Therefore, all undertakings should report how business model resilience has been assessed and if a range of biodiversity and ecosystems-related scenarios were used to inform the assessment. If so, undertakings should explain scenarios, assumptions and modelling parameters used.
- BC55. Limiting such information to an undertaking's own operations might disguise principal biodiversity and ecosystems-related dependencies, impacts, risks and opportunities that are linked to its broader business context. Hence, reporting should take into account the whole value chain of an undertaking.

Choice of specific disclosures

Transition plan in line with the targets of no net loss by 2030 and net gain by 2050

- BC56. The [draft] standard includes the following Disclosure Requirement 1: **“The undertaking shall disclose its plans to ensure that its business model and strategy are compatible with the transition to achieve no net loss by 2030 and net gain by 2050.”**
- BC57. Stakeholders need to understand how the undertaking plans to ensure that its business model and strategy are compatible with the transition to a nature-positive economy, achieving no net loss of biodiversity by 2030, and net gain of biodiversity by 2050 aligned with a pathway leading to nature's full recovery by 2050.
- BC58. A transition plan is essentially a cross-cutting instrument that contains different elements related to strategy, policies, targets, action plans and resources. Consequently, the disclosure should include information that is material to understand the undertaking's strategic direction, including references but not duplicating, information from other sections of the [draft] standard.
- BC59. An undertaking's transition plan is different from its actions plan(s) that address biodiversity and ecosystems impact, dependencies, risks and opportunities. The transition plan is understood as part of an undertaking's overall strategy that includes a set of targets and actions supporting its transition towards a nature-positive economy. A biodiversity and ecosystems action plan (e.g. on restoration) is considered to be a part of the overall transition plan, and is more specific by providing an overview of key actions taken or planned to achieve a specific e.g. biodiversity and ecosystems restoration target or to implement a e.g. land use change mitigation policy, including timelines, responsibilities, (expected) outcomes and allocated resources.

Resilience of the strategy and business model to principal biodiversity and ecosystems-related physical and transition risks

- BC60. The [draft] standard includes the following Disclosure Requirement 2: **“The undertaking shall disclose an assessment of the resilience of the current business model(s) and strategy to biodiversity and ecosystems-related physical and transition risks in light of a range of biodiversity and ecosystems-related scenarios”.**
- BC61. Resilience is generally understood as the ability of a system and its component parts to anticipate, absorb, accommodate, or recover from the effects of a hazardous event in a timely and efficient manner, including through ensuring the preservation, restoration, or

improvement of its essential basic structures and functions.⁴⁷ More specifically, the level of disturbance that an ecosystem or society can undergo without crossing a threshold to a situation with different structure or outputs. Resilience depends on factors such as ecological dynamics as well as the organizational and institutional capacity to understand, manage, and respond to these dynamics.⁴⁸

BC62. When describing the resilience of the strategy and business model(s) towards biodiversity and ecosystems-related risks, an undertaking should therefore reflect on how the materialisation of its principal transition and physical risks could affect the way it creates value and the mechanisms with which the strategy and business model(s) can absorb or recover from these effects.

BC63. To appropriately incorporate the potential effects of biodiversity and ecosystems in their strategic decision making, organisations should consider how biodiversity and ecosystems risks and opportunities may evolve over time and what their potential business implications are under different conditions. For this purpose, it is to be observed that biodiversity and ecosystems-related scenario analysis is a highly useful approach. At the same time for many undertakings, it is a new concept. It brings along methodological and operational challenges. However, all undertakings should report how business model resilience has been assessed and if a range of biodiversity and ecosystems-related scenarios was used to inform the assessment. If so, undertakings should explain scenarios, assumptions and modelling parameters used.

Specific Disclosures on Biodiversity and Ecosystems-related Governance

Why disclose on biodiversity and ecosystems-related governance?

EU legislation and recommendations

BC64. Article 19a lit. (e) of the CSRD-proposal⁴⁹ requires entities to disclose “a description of the role of the administrative, management and supervisory bodies with regards to sustainability factors”.

BC65. Annex IV of the EMAS Regulation⁵⁰ states that the environmental statement shall contain “a brief description of the governance structure supporting the environmental management system of the organisation”.

BC66. The EMAS and Biodiversity 2016 guidelines underline that “biodiversity is a complex field and the concepts of ecosystem services and natural capital do not simplify the challenge for businesses, which is to analyse and deal with the initial situation and the various influences. A business may obtain technical support from research institutions, nature conservation authorities or nature conservation organisation when it comes to determining the relevance of biodiversity, defining targets and activities, and monitoring the business's development in this field”.

Global reporting frameworks

BC67. The CDSB Application Guidance for Biodiversity-related disclosures requests information about stakeholder interactions in relation to biodiversity “As impacts and dependencies related to biodiversity are likely to be found outside the direct operations and may result in unintended social consequences on local communities, the relationship between an organisation, the actors within its value chain and other stakeholders plays a key role in managing and mitigating biodiversity-related issues. A concise description of existing governance mechanisms illustrating how the organisation selects, engages, and collaborates with stakeholders in addressing biodiversity-related issues constitutes useful information to investors.”

⁴⁷ IPCC, “Fifth Assessment Report (AR5) Climate Change: Impacts, Adaptation, and Vulnerability”, 2014. Available [here](#).

⁴⁸ IPBES glossary

⁴⁹ Proposal for a directive of the European Parliament and of the Council amending Directive 2013/34/EU, Directive 2004/109/EC, Directive 2006/43/EC and Regulation (EU) No 537/2014, as regards corporate sustainability reporting. Available [here](#).

⁵⁰ The Revised Annexes of the EMAS Regulation, 2018. Available [here](#).

BC68. The following information is recommended:

- (a) “Collaboration with biodiversity organisations or experts to understand emerging trends and good conservation practices, including site-level examples to demonstrate how stakeholder concerns about potential impacts are addressed by the organisation;
- (b) Engagement with local communities, consideration of their perspective of the organisation’s biodiversity conservation planning and related activities and collaboration, e.g. with smallholder farmers, to support the implementation of agricultural practices that do not harm natural ecosystems and related biodiversity;
- (c) Involvement in multi-stakeholder initiatives or partnerships aimed at improving the understanding of biodiversity and ecosystems, and/or at addressing impacts to biodiversity; and
- (d) Partnerships with third parties to protect or restore habitat areas distinct from where the organisation has overseen and implemented restoration or protection measures.”

BC69. The SASB Standards⁵¹ suggest that companies should disclose the entity’s governance around the risks and opportunities related to the topic, including board oversight of and management’s role in assessing and managing such risks and opportunities.

BC70. The IR Framework⁵² highlights that an integrated report should answer the following question: How does the organisation’s governance structure support its ability to create value in the short-, medium- and long-term? Thus, an integrated report provides insight about how such matters as the following are linked to its ability to create value.

BC71. GRI 2 “general disclosures” requires a whole range of governance disclosures, including governance structure and composition, nomination and selection of the highest governance body, chair of the highest governance body, role of the highest governance body in overseeing the management of impacts, delegation of responsibility for managing impacts, role of the highest governance body in sustainability reporting, conflicts of interest, communication of critical concerns, collective knowledge of the highest governance body, evaluation of the performance of the highest governance body, remuneration policies, process to determine remuneration, annual total compensation ratio (disclosures 2-9 until 2-21).

BC72. Noting that the Sharm El-Sheikh Declaration (2018) underlines “that we need to form alliances to mainstream biodiversity across sectors to better align goals, actions and resources, feeding into a coordinated approach on biodiversity- sustainability actions, as a center piece for the transition to sustainable development, hand in hand with safeguarding and restoring biodiversity and ecosystem functions”, multistakeholder actions are warranted for addressing biodiversity & ecosystems issues.

BC73. The CBD (1992) also stresses the importance of, and the need to promote, international, regional and global cooperation among States and intergovernmental organizations and the non-governmental sector for the conservation of biological diversity and the sustainable use of its components.

BC74. In addition, the Science Based Target Initiative states that “Current or changing policies in different locations where your (or your subsidiaries’) value chains extend may influence where actions are taken and what kind of actions are possible. For instance, the potential to act ahead of future regulatory changes or the ability to align actions with local or national environmental policy can make it strategically beneficial to prioritize action in specific places.” (2020, p.30)

BC75. In relation to multistakeholder and value chain governance, the SBTN Initiatives emphasize the need for collaboration “Your business, like the economy, is embedded within a complex system involving human and nonhuman stakeholders all over the world. The targets set should be aligned with the long-term sustainability goals of landscapes and seascapes your business affects. Strive to understand and empathize with actors in your value chain, including other companies, smallholders, and government agencies that are operating or living in your priority landscapes and/or seascapes. This will help you and other actors

⁵¹ SASB Standards. Available [here](#).

⁵² IR Framework, January 2021. Available [here](#).

understand how your actions influence each other and work toward collaborative solutions where issues currently exist. Within your value chain and associated landscapes or seascapes, you should incentivize the action of others—invest in initiatives to build the capacity of others to take environmental action. Where SMEs and smallholders are involved, actions that provide a living wage have been demonstrated to shift practices effectively for the long term (see Meridian’s work). Work with other stakeholders, like governments, but also the companies that share pieces of your value chain to align communication, incentives, and actions. Collaboration will shape your ability to formulate efficient solutions (including through processes of collaborative assessment and co-creation of targets) that can deliver multiple benefits to multiple actors, rather than create consequential trade-offs among them. It will also help form effective coalitions for target implementation.” (p.43)

Users’ needs

BC76. The objective is that stakeholders understand the governance of the undertaking, including:

- (a) board organisation, oversight process and responsibilities for biodiversity and ecosystems;
- (b) board member qualifications;
- (c) responsibilities devolved to management for biodiversity and ecosystems and how they are supervised;
- (d) management qualifications;
- (e) incentives and related metrics used for biodiversity and ecosystems;
- (f) how the undertaking’s policy on biodiversity and ecosystems is aligned with public policy;
- (g) how the undertaking engages with policy makers and for what purpose.

Conclusions

BC77. The undertaking’s governance around biodiversity and ecosystems aspects, including board oversight of and management’s role in assessing and managing related risks and opportunities, should adequately be disclosed in order for all the stakeholders to understand how these aspects are taken into consideration inside the undertaking’s activities.

BC78. The cross-cutting standard which covers governance requires disclosure of the role played by the board and on the responsibilities devolved to management, as well as metrics incorporated into remuneration policies.

BC79. The specific disclosures on biodiversity and ecosystems-related governance should thus focus on the following topics: internal pricing schemes and engagement with public policy makers.

Choice of specific disclosures

Internal biodiversity and ecosystems-related pricing schemes

BC80. The [draft] standard includes the following Disclosure Requirement 3: **“The undertaking may disclose whether and how the internal biodiversity and ecosystems-related pricing schemes applied support its decision making.”**

BC81. This disclosure aims to provide an understanding of how biodiversity and ecosystems-related impacts, risks and opportunities are integrated in an undertaking’s strategic and operational decision-making processes, as internal biodiversity and ecosystems prices influence the reduction of an undertaking’s impact and support the assessment, anticipation and management of biodiversity and ecosystems-related transition risks and opportunities. Companies should disclose how internal biodiversity and ecosystems pricing schemes are used to systematically assess biodiversity and ecosystems-related transition risks and opportunities and incentivise the reductions of biodiversity and ecosystems-related impacts in their operations and in the value chain and describe which internal price levels are used, how they are selected and which biodiversity and ecosystems volumes they are applied to.

BC82. With regards to the assessment of potential financial impacts of transition risks, internal prices can be used in different contexts, such as informing investment decisions (R&D, assets, acquisitions, etc.), liabilities valuation or financial scenarios (impairment tests, fair

value measurement, growth scenarios, etc.). A reconciliation between the internal prices used in these various contexts, and comments on the assumptions made is useful to understand the consistency of undertaking's practices.

Roles and responsibilities of governance bodies

BC83. The [draft] standard includes the following Disclosure Requirement 4: **“The undertaking shall disclose a description of how it engages in activities that could either directly or indirectly influence public policy on biodiversity and ecosystems.”**

BC84. The disclosure is related to the activities performed by the undertaking in order to promote the protection and conservation of biodiversity and ecosystems.

BC85. This disclosure aims to provide an understanding of how the undertaking has worked with policymakers in order to develop or advocate for policy changes specifically designed to contribute to biodiversity and ecosystems issues over the reporting period.

BC86. These activities must be consistent with biodiversity and ecosystems policies, commitments and targets to which the undertaking is committed.

Specific Disclosures on Biodiversity and Ecosystems-related Impacts, risks and opportunities

Why disclose impacts on biodiversity and ecosystems-related disclosures?

EU legislation and recommendations

BC87. Article 19a (1) of the CSRD-proposal⁵³ requires undertakings to include in the management report information “necessary to understand the undertaking’s impacts on sustainability matters, and information necessary to understand how sustainability matters affect the undertaking’s development, performance and position” (concept of double materiality). In this regard, Article 19a (2) lit. (e) (ii) CSRD-proposal requires a description of the “principal actual or potential adverse impacts connected with the undertaking’s value chain, including its own operations, its products and services, its business relationships and its supply chain” (impact materiality). Article 19a (2) lit. (f) CSRD-proposal requires “a description of the principal risks to the undertaking related to sustainability matters, including the undertaking’s principal dependencies on such matters, and how the undertaking manages those risks” and Article 19a (2) lit. (a) (ii) refers to “the opportunities for the undertaking related to sustainability matters” (financial materiality⁵⁴).

BC88. Already under Article 19a (1) lit. (d) NFRD entities under its scope are required to report on the principal risks related to sustainability matters and how the undertaking manages those risks.

BC89. Articles 4 and 6 of the Sustainable Finance Disclosure Regulation (‘SFDR’)⁵⁵ require transparency from financial market participants on activities negatively affecting biodiversity-sensitive areas, with the metric “Share of investments in investee companies with sites/operations located in or near to biodiversity-sensitive areas where activities of those investee companies negatively affect those areas”.

BC90. Annex IV of Regulation (EC) No. 1221/2009 (Eco-Management and Audit Scheme - EMAS)⁵⁶ requires organisations that participate in EMAS to disclose in their environmental statements “a description of all the significant direct and indirect environmental aspects which result in significant environmental impacts of the organisation, a brief description of

⁵³ Proposal for a directive of the European Parliament and of the Council amending Directive 2013/34/EU, Directive 2004/109/EC, Directive 2006/43/EC and Regulation (EU) No 537/2014, as regards corporate sustainability reporting. Available [here](#).

⁵⁴ As conceptualised in the PTF-NFRS final report “Proposals for a relevant and dynamic EU sustainability reporting standard-setting”, pp. 74-82, March 2021. Available [here](#).

⁵⁵ Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability-related disclosures in the financial services sector. Available [here](#).

⁵⁶ The Revised Annexes of the EMAS Regulation, 2018. Available [here](#).

the approach used to determine their significance and an explanation of the nature of the impacts as related to these aspects.”

BC91. According to the “EMAS and Biodiversity” 2016 Guidelines, as part of a preliminary analysis the undertaking would be required to: “1. Take biodiversity into account when determining the context of the organisation. 2. Take biodiversity into account when assessing the significance of its environmental aspects. During the environmental review, the organisations will also need to consider the legal requirements related to biodiversity that concern its activities, products or services. The significance of these environmental aspects, including their impact on biodiversity, shall also be periodically evaluated as part of the environmental audit of the organisation”.

BC92. The Product Environmental Footprint (PEF) method “does not include any impact category named “biodiversity”, as currently there is no international consensus on a life cycle impact assessment method capturing that impact. However, the PEF method includes at least eight impact categories that have an effect on biodiversity (i.e., climate change, eutrophication aquatic freshwater, eutrophication aquatic marine, eutrophication terrestrial, acidification, water use, land use, ecotoxicity freshwater)”. (p.40)

Global reporting frameworks

BC93. The SASB Standards⁵⁷ suggest that companies should disclose the entity’s process to identify, assess, and manage topic-related risks, and how these risks are integrated into the entity’s overall risk management process. Each industry specific SASB Standard includes biodiversity-related risks and opportunities that are likely to be material in a given industry.

BC94. The IR Framework⁵⁸ highlights that an integrated report should answer the following question: What are the specific risks and opportunities that affect the organisation’s ability to create value over the short-, medium- and long-term, and how is the organisation dealing with them? Thus, an integrated report should identify the key risks and opportunities that are specific to the organisation, including those that relate to the organisation’s effects on, and the continued availability, quality and affordability of, relevant capitals in the short-, medium- and long-term.

BC95. In its Universal Standards⁵⁹ GRI suggests the disclosure of the “effectiveness of risk management processes” (Disclosure 102-30).

BC96. The CBD (1992) recommends identifying “processes and categories of activities which have or are likely to have significant adverse impacts on the conservation and sustainable use of biological diversity”.

BC97. Target 15 of the post 2020 monitoring framework states that “All businesses (public and private, large, medium and small) assess and report on their dependencies and impacts on biodiversity, from local to global, and progressively reduce negative impacts, by at least half and increase positive impacts, reducing biodiversity-related risks to businesses and moving towards the full sustainability of extraction and production practices, sourcing and supply chains, and use and disposal.”

BC98. The CDSB Consultation draft on Biodiversity suggests the following disclosure “REQ-03 Risks and opportunities”:

- (a) Identify material biodiversity-related risks and opportunities (including those arising from the loss of related final ecosystem services) by adopting a value-chain approach and considering different types of risk?
- (b) Explain the implications of material biodiversity-related risks on business and value chains, specifying geographical locations, time horizons in which the risks will materialise and how they relate to priority geographical areas?

⁵⁷ SASB Standards. Available [here](#).

⁵⁸ IR Framework, January 2021. Available [here](#).

⁵⁹ GRI, “GRI Universal Standards: GRI 101, GRI 102, and GRI 103 – Exposure draft”, June 2020. Available [here](#).

- (c) Explain the implications of material biodiversity-related opportunities on business and value chains, specifying geographical locations and time horizons in which the opportunities will materialise?
- (d) Quantify biodiversity-related risks and opportunities in the context of the organisation's enterprise value, using relevant financial and non-financial metrics.
- (e) Describe the systems and processes used for assessing, identifying, and monitoring biodiversity-related risks and opportunities, including whether they are integrated with existing risk management systems and processes?

BC99. The CDSB Consultation draft on Biodiversity suggests the following disclosure "REQ-06 Outlook – Does the disclosure":

- (a) Explain the likely effect of future biodiversity-related impacts, risks, and opportunities as well as of biodiversity strategy on organisation performance and resilience, taking account of regulatory and market trends and environmental changes?
- (b) Identify and explain the time horizons used for reporting on corporate outlook?
- (c) Explain any techniques, such as scenario analysis, used to inform the outlook including the methods, scenarios and assumptions used, and any shortcomings and uncertainties?

BC100. According to the Science Based Target for Nature Initiative undertakings need to gather and/or supplement existing data to estimate your value chain-wide impacts and dependencies on nature, resulting in a list of potential issue areas and locations for target setting (p.12). The undertaking then needs to estimate where impacts and dependencies occur throughout their value chain, both in terms of supply chain tiers and places (p. 16).

BC101. The Science Based Target for Nature Initiative also emphasizes the key difference between designing targets for climate versus for nature: for biodiversity and ecosystems, "the impact assessment, response option assessment, and progress assessment need to be location specific. (...) This is because most key issue areas for nature, like biodiversity, water availability, land conversion, and deforestation, are extremely location dependent". (p. 20/21)

BC102. The Biodiversity Guidance of the Natural Capital Protocol⁶⁰ says about risks "biodiversity loss can post direct risks to your business operations where you have dependencies on the goods and services that biodiversity generates, either directly and/or within supply chains. The risks of disruption will continue to intensify if biodiversity continues to be lost. In many instances, the majority of the benefits from biodiversity are received by society rather than directly by your business. As a result, where your business activities impact on biodiversity, you face risks associated with societal relationships, reputation, marketing, laws, regulations, and access to finance. Reputational risks to business are increasing as biodiversity continues to decline, and as pressure from consumers to slow and reverse this decline continues to grow. For example, impacts on charismatic species affect societies who place value upon them for cultural, ethical and/or philosophical reasons. Threats to these species resulting from business operations can create reputational risks for business" (p.16)

BC103. The Biodiversity Guidance of the Natural Capital Protocol⁶¹ says this about opportunities "understanding biodiversity as an integral part of natural capital stocks, as well as its role in underpinning the goods and services that stocks generate, allows you to identify and manage potential new business opportunities, business models that are viable in the long term, cost savings and increase in operational efficiency. If your business is able to demonstrate minimal impacts, or biodiversity enhancements, are you likely to secure benefits such as preferential access to resources and financing, better relationship with stakeholders, maintaining a social license to operate, and retaining employees." (p.17)

BC104. The Biodiversity Guidance of the Natural Capital Protocol⁶² says this about assessing business risks & opportunities "BA7: screening and assessment of biodiversity risks and

⁶⁰ https://capitalscoalition.org/guide_supplement/biodiversity-4/

⁶¹ https://capitalscoalition.org/guide_supplement/biodiversity-4/

⁶² https://capitalscoalition.org/guide_supplement/biodiversity-4/

opportunities: assessing business risk, for example for due diligence assessments as part of mergers and acquisitions, or assessments undertaken by investors to differentiate between investment options, either based on the biodiversity performance or return on investment of different companies. This might also be undertaken by financial institutions to assess biodiversity risk and inform pricing credit. Assessing business opportunities related to nature restoration, for example investing in nature-based solutions” (p.19)

Users' needs

BC105. The objective is that stakeholders understand:

- (a) what impacts are caused, and will be caused, to biodiversity and ecosystems by the undertaking, over the value chain (supply chain, operations, products and services), and what are, will be, the financial costs;
- (b) how the state of biodiversity and ecosystems has impacted and will impact the undertaking's value chain in which location and what are, will be, the financial costs. What are and will be the consequences of these physical and financial impacts in term of risks and opportunities;
- (c) how impacts, risks, opportunities and dependencies are assessed and how they serve as an input to the elaboration of the undertaking's strategy and business model.

Conclusions

BC106. Due to their activities and business relationships currently most if not all undertakings contribute – to varying extents – to the loss of biodiversity and degradation of ecosystems. Lost biodiversity and degraded ecosystems will both negatively impact ecosystem services. Undertakings, however, heavily depend on biodiversity, intact ecosystems and ecosystem services to generate value. The operations of the undertaking will increasingly be affected through physical hazards induced by degraded ecosystems or policy and market responses in the EU and beyond to limit biodiversity loss in line with the Convention on Biological Diversity. On the other hand, the transition to a nature-positive economy may also result opportunities to the undertaking, e.g. for undertakings offering products and services that contribute to protection and restoration of biodiversity and ecosystems.

BC107. There is a well-founded need among the public in general, and among investors, credit institutions and other stakeholders, who rely on an undertaking's ability to create value over the short-, medium- and long term, to understand how it impacts of biodiversity loss and ecosystems degradation, is exposed to related transition and physical risks and identify opportunities, including along the value chain. To achieve such a comprehensive understanding, Cluster 3 sees the need to create transparency on the principal impacts, risks and opportunities as such but also the processes the undertaking has implemented to identify, assess and manage them.

BC108. In summary, reporting on the dependencies and impacts on biodiversity and ecosystems as well as related risks and opportunities, covering own operations and the whole value chain, is material for all undertakings.

BC109. The identification, assessment and management of the adverse impacts on biodiversity and ecosystems reflect a part of an undertakings due diligence process related to biodiversity and ecosystems. Since due diligence as such is a cross-cutting concept, it is reflected in different sections of the ESRS E4 draft standard. Information on the management of adverse impacts on biodiversity and ecosystems are further underpinned in sections on “Governance” and “Policies”. Actions to mitigate these adverse impacts are addressed in section “Targets” and “Actions Plans & Dedicated Resources”.

BC110. Impacts on biodiversity and ecosystems are location-specific. Therefore, disclosures need to contain a geographical dimension.

Choice of specific disclosures

Identification and assessment processes of biodiversity and ecosystem services dependencies and impacts

BC111. The [draft] standard includes the following Disclosure Requirement 5: **“The undertaking shall disclose how it has identified and assessed material:**

- (a) biodiversity and ecosystem services dependencies and impacts, including the state of species, genes and ecosystems and;**
 - (b) drivers of biodiversity loss;**
- by material geographical location of sites and/or by material raw material.**

Material biodiversity and ecosystems dependencies and impacts, and material biodiversity loss drivers

BC112. The [draft] standard includes the following Disclosure Requirement 6: **“The undertaking shall disclose its material dependencies and impacts by categories and its material biodiversity loss drivers by geographical location of sites, and/or by raw material, within its operations and along its value chain.”**

Processes to identify material biodiversity and ecosystems risks and opportunities

BC113. The [draft] standard includes the following Disclosure Requirement 7: **“The undertaking shall disclose its processes to identify and assess its:**

- (a) short-, medium- and long-term biodiversity and ecosystems-related physical risks and opportunities, in its operations and along the value chain;**
- (b) short-, medium- and long-term biodiversity and ecosystems transition risks and opportunities, including policy, legal, technology, and market risks and opportunities, in its operations and along the value chain.”**

Material biodiversity and ecosystems-related physical and transition risks and opportunities

BC114. The [draft] standard includes the following Disclosure Requirement 8: **“The undertaking shall disclose its principal biodiversity and ecosystems-related risks and opportunities by categories within its operations and along its value chain.”**

Biodiversity and Ecosystems-related Policies

EU legislation and recommendations

BC115. In the European Commission's proposal for a Corporate Sustainability Reporting Directive ('CSRD'), articles 5 and 6 of Directive 2014/95 amending EU directive 2013/34/EU stipulates that undertakings subject to this directive should give a fair and comprehensive view of their policies, outcomes and risks, at least for environmental matters, social and employee related matters, respect for human rights, anti-corruption and bribery matters.

BC116. The EMAS and Biodiversity 2016 guidelines emphasize that “The environmental and sustainability policy of a business should deal with the effects of the business on biodiversity and clearly indicate the priorities for improvements. Among other things, it is important to use the internationally recognised terminology. Where separate definitions for certain biodiversity aspects are required, these must be explained clearly and comprehensively.”

BC117. Annex II of the EMAS Regulation⁶³ states that among other duties top management has to take accountability for the effectiveness of the environmental management system,

⁶³ The Revised Annexes of the EMAS Regulation, 2018. Available [here](#).

ensure that the environmental policy and environmental objectives are established and that the requirements of the EMS are integrated into the organisation's business processes.

BC118. The SFRD requested that investee companies report on "Share of investments in investee companies without a biodiversity protection **policy** covering operational sites owned, leased, managed in, or adjacent to, a protected area or an area of high biodiversity value outside protected areas", as well as "Share of investments in companies without a **policy** to address deforestation".

BC119. The PTF NFRS⁶⁴ argues in its final report that "policies are not only a formal, adopted and dated paper but include an operational implementation with defined related objectives, specific coverage of activities and an accountable person in oversight."

Global reporting frameworks

BC120. International Organisation for Standardisation ('ISO') 14001⁶⁵ defines environmental policies as "intentions and direction of an organization related to environmental performance as formally expressed by its top management".

BC121. The CBD states that the parties (countries) should "integrate, as far as possible and as appropriate, the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programmes and policies"⁶⁶.

BC122. Regarding policy commitments, the GRI Universal Standards 2021⁶⁷ suggest that organisation should:

- (a) describe its policy commitments for responsible business conduct;
- (b) describe its specific policy commitment to respect human rights;
- (c) provide links to the policy commitments if publicly available, or, if the policy commitments are not publicly available, explain the reason for this;
- (d) report the level at which each of the policy commitments was approved within the organization, including whether this is the most senior level;
- (e) report the extent to which the policy commitments apply to the organization's own activities and to its business relationships;
- (f) describe how the policy commitments are communicated to workers, business partners, and other relevant parties.

BC123. The CDP Forest questionnaire includes questions on the forest policy of organisations, on its scope and content and on public commitment towards voluntary initiatives.

BC124. According to the CDSB Application Guidance for Biodiversity Disclosures, "Organisations should outline policies, strategies and public commitments to protect, restore or sustainably use biodiversity".

Users' needs

BC125. The objective is that stakeholders understand the content of the documents which describe how the undertaking:

- (a) avoids its negative impacts on biodiversity and ecosystems in its operations and throughout the value chain;
- (b) minimizes its negative impacts on biodiversity and ecosystems in its operations and throughout the value chain that cannot be avoided;

⁶⁴ PTF NFRS, "Final Report Proposal for a Relevant and Dynamic EU Sustainability Reporting Standard-Setting", February 2021. Available [here](#).

⁶⁵ ISO 14001:2015, Environmental management system – Requirements with guidance for use, September 2015. Available [here](#).

⁶⁶ The Convention for Biological Diversity (1992), article 6, p.5.

⁶⁷ Draft GRI Universal Standards 2021, p 67. Available [here](#).

- (c) rehabilitates degraded ecosystems or restore cleared ecosystems following exposure to impacts that cannot be completely avoided and/or minimised;
- (d) mitigates material biodiversity loss drivers as disclosed in the section dependencies, impacts, risks and opportunities;
- (e) monitors and manages its physical and transition risks and opportunities.

BC126. Stakeholders should also understand how the undertaking engages with suppliers, how its policies allow the sustainable production, consumption and sourcing of raw materials, and how the social consequences of biodiversity and ecosystems related dependencies and impacts are taken into account into policies. Finally, stakeholders should also understand how the content of policies is implemented.

Conclusions

BC127. It is to be observed that there are different interpretations of the term “policies”. It can be either understood as formal commitments by an undertaking’s leadership (e.g. GRI, ISO 14001/EMAS) or as overarching topic-specific implementation plans (e.g. PTF-NFRS, or TCFD’s understanding of “transition plans”) including different elements (e.g. commitments, targets, action plans and performance metrics and monitoring). However, it is to be noted that the structure inherent to the ESRS already covers most elements of a policy in separate reporting areas.⁶⁸

BC128. As a consequence, the ‘Policies’ reporting area should focus on describing policy commitments related to biodiversity and ecosystems, sustainable production, consumption and sourcing of raw materials, screening and engagement of suppliers on biodiversity and ecosystems-related aspects and social consequences of biodiversity and ecosystems-related dependencies and impacts.

BC129. It is to be noted that an undertaking’s transition plan, making reference to policy commitments, key actions and investments reporting on transition and relevant metrics, should be reported on a high-level under the reporting area “biodiversity and ecosystems-related strategy and business model”.

Choice of specific disclosures

Policies implemented to manage biodiversity and ecosystems

BC130. The [draft] standard includes the following Disclosure Requirement 9: **“The undertaking shall disclose separately its policies regarding:**

- (a) biodiversity and ecosystems;**
- (b) the sustainable production, consumption and sourcing of raw materials;**
- (c) screening and engaging with suppliers on biodiversity and ecosystems;**
- (d) the social consequences of biodiversity and ecosystems related dependencies and impacts.**

BC131. Undertakings should create transparency on all policy commitments in place regarding biodiversity and ecosystems (e.g. stand-alone policy documents, codes of conduct, commitments to biodiversity and ecosystems-related initiatives, etc.).

BC132. Undertakings should make reference to third-party standards of conduct that should be: achievable, developed or maintained through a process of ongoing consultation with relevant stakeholders, encouraging continuous improvement and verifiable.

BC133. For the disclosure of policies related to social aspects of biodiversity and ecosystems related dependencies and impacts, the undertaking shall notably refer to internationally recognized documents/standards such as: the Nagoya Protocol, the Convention for Biological Diversity (CBD), the IFC Performance Standard 4, 5 and 7 and the Core Principles from the Accountability Framework (Principle 2 ‘Respect for Human Rights’).

⁶⁸ This analysis may be challenged by the cross-cutting reference standards currently under development.

Biodiversity and Ecosystems-related Targets

Why disclose on biodiversity and ecosystems-related targets?

EU legislation and recommendations

BC134. Article 19a (2) lit. (b) CSRD-proposal requires “a description of the targets related to sustainability matters set by the undertaking and of the progress the undertaking has made towards achieving those targets”⁶⁹.

BC135. The European EMAS Regulation⁷⁰ requires organisations that participate in EMAS to report on the “environmental objectives and targets in relation to the significant environmental aspects and impacts”.

Global reporting frameworks

BC136. The Science Based Target for Nature Initiative propose to set “targets aligned with Earth’s limits and societal goals, and then disclose these publicly” (2020, p.12).

BC137. The SBTN Initiative also states that targets should be “based on inclusive, transparent, and empowering processes. Where possible, targets should be created in consultation and collaboration with value chain stakeholders, using participatory processes that uphold equity and rights-based approaches (especially including the rights of Indigenous peoples) and adhere to the principle of free, prior, and informed consent (FPIC). Those groups of society that have been historically marginalized, discriminated against, or persecuted must be given fair opportunities to participate in decision-making related to benefits generated by the company and its operations, and to accessing these benefits (where applicable). (...) Target decision-making processes must be documented and include a verified stakeholder grievance mechanism prior to target implementation”. (2020, p.43)

BC138. According to the Biodiversity Guidance of the Natural Capital Protocol, “the results of a natural capital assessment can also inform the setting of corporate biodiversity targets. This might include commitments to “no net loss” and “net gain” of biodiversity and/or commitments in response to regulatory drivers, such as the targets in the EU Biodiversity Strategy”. The Guidance also suggest some target-setting initiatives to align with, such as the Science Based Targets for Nature, the Global Apex, Goal for Nature, the CBD post-2020 biodiversity framework or the SDGs 14 and 15.

BC139. GRI 3: “material topics” includes a requirement to report targets used to evaluate progress.

BC140. The CDSB Biodiversity application guidance⁷¹ states that detailed and consistent disclosure and related timelines is especially important for the reporting of corporate targets to enable the measurement of performance against biodiversity policies and strategies over time. The results of biodiversity impact and dependency assessments, ecosystem services assessments, biodiversity footprint assessments, and risk assessments may be helpful to inform targets:

- (a) Are the targets contextual and science-based?
- (b) Have the baseline/reference state and target year been defined?
- (c) Are targets quantifiable?
- (d) Are specific targets set for priority species, ecosystems, geographical areas and products/ services or for areas where no biodiversity standards exist (e.g. set by regulatory mechanisms)?

⁶⁹ Proposal for a directive of the European Parliament and of the Council amending Directive 2013/34/EU, Directive 2004/109/EC, Directive 2006/43/EC and Regulation (EU) No 537/2014, as regards corporate sustainability reporting. Available [here](#).

⁷⁰ Commission Regulation (EU) 2018/2026 of 19 December 2018 amending Annex IV to Regulation (EC) No 1221/2009 of the European Parliament and of the Council on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS). Available [here](#).

⁷¹ [CDSB Framework Application guidance for biodiversity-related disclosures | Climate Disclosure Standards Board](#)

- (e) Are targets measured through KPIs and are these used internally by management?
- (f) Have targets been discussed with stakeholders? Will they fulfil stakeholder expectations?
- (g) Are targets aligned with international goals, and/ or with regional, national, or local regulations?
- (h) How do targets link to and contribute towards commitments such as “no net loss” or “net gain” and/or commitments in response to regulatory or impact drivers?

BC141. The CDP Forest questionnaire asks undertakings to disclose information regarding their approach to setting and monitoring timebound and quantifiable targets for increasing sustainable production and/or consumption of commodity(ies), as well as progress made and in case no targets have been set, to state, why this is the case and if there are plans to develop them in the future.

BC142. The TNFD (2021) Technical Scope states that “Each organisation’s governance, strategy, risk management, metrics and targets should be designed to mitigate risks to the organisation (“outside in”) including risks associated with its impact on nature (“inside out”)”.

Users’ needs

BC143. The ‘Board’ considers regulators and other stakeholders need to understand undertaking’s targets related to the reduction of the loss of natural capital and related ecosystem services. The UN Conference of the Parties to the Convention on Biological Diversity in Kunming, China aims at adopting a global biodiversity framework, featuring global and national measurable targets. At the same time, Cluster 3 considers investors and other stakeholders are increasingly willing to act as evidenced by the formation of several initiatives, such as the Taskforce on Nature-related Financial Disclosures (TNFD) and SBTN.

BC144. The objective is that stakeholders understand:

- (a) the process by which strategy is translated into goals and measurable targets;
- (b) how these goals and targets are also connected to global and EU policy goals (please see *Appendix 2 “Global and EU goals and targets”* for reference);
- (c) how targets are monitored;
- (d) what aspects of biodiversity and ecosystems are covered by targets.

Conclusions

BC145. In order to ensure a sound understanding of the undertaking’s targets related to biodiversity and ecosystems and to be able to assess those targets’ contribution to the achievement of targets set out in EU-regulation and global frameworks, specific targets on nature loss mitigation, protection and restoration actions that the undertaking intends to achieve in the future and their effectiveness in ensuring compatibility with net gain by 2050 shall be disclosed.

BC146. The concept of no net loss by 2030 and net gain by 2050 is principally designed to be applied at global or sub-global scales but acknowledges attempts to define methodologies to determine net-nature loss and gain at an entity level. There is not yet consensus on the definition and methodologies for assessing nature-positivity and net zero nature loss at the entity level, but the Science-Based Target for Nature Initiative is working on delivering guidelines in the coming months.

BC147. Further guidelines on local/context-based biodiversity and ecosystems “budgets”, building on existing work from IPBES and others such as from biodiverse - ERA-NET promoting European research on biodiversity and Belmont Forum⁷² could be helpful for undertakings to set and disclosure no net loss, net gain targets.

⁷² [Handbook on the use of biodiversity scenarios](#) (biodiverse and Belmont Forum)

Choice of specific disclosures

Measurable targets for biodiversity and ecosystems

BC148. The [draft] standard includes the following Disclosure Requirement 10: **“The undertaking shall disclose its adopted, measurable, outcome-oriented biodiversity and ecosystem-related targets**

Biodiversity and Ecosystems-related Action plans and dedicated resources

EU legislation and recommendations

BC149. Article 19a (2) lit. e) CSRD-proposal requires “a description of any actions taken and the results of these actions to prevent, mitigate or remediate actual, or potential adverse impacts”⁷³.

BC150. Under the Taxonomy Regulation⁷⁴, non-financial undertakings shall disclose the part of their CapEx and operating expenditure (‘OpEx’) which contributes to climate mitigation and adaptation objectives. The capital expenditure shall relate to assets or processes that are associated with Taxonomy-aligned economic activities, that are part of a plan to expand Taxonomy-aligned economic activities or to allow Taxonomy-eligible economic activities to become Taxonomy-aligned (‘CapEx plan’) within a 5-year timeframe or that are related to the purchase of output from Taxonomy-aligned economic activities, provided that such measures are implemented and operational within 18 months.

BC151. Non-financial undertakings shall disclose the key information about each of their CapEx plans when the plan aims to expand the undertaking’s Taxonomy-aligned economic activities. The CapEx plan shall be approved by the non-financial undertaking’s Management Board.

BC152. Annex II of the EMAS Regulation⁷⁵ requires undertakings that participate in EMAS when planning how to achieve its environmental objectives, to determine:

- (a) what will be done,
- (b) what resources will be required,
- (c) who will be responsible,
- (d) when it will be completed.

BC153. Annex II of the EMAS Regulation⁷⁶ states that the undertaking must plan actions to address issues that can affect its environmental management system, that respond to the needs and expectations of interested parties, and that correspond to identified risk and opportunities.

BC154. Annex IV of the EMAS Regulation⁷⁷ requires organisations that participate in EMAS to report on the actions implemented and planned to improve environmental performance, achieve the objectives and targets and ensure compliance with legal requirements related to the environment

⁷³ Proposal for a directive of the European Parliament and of the Council amending Directive 2013/34/EU, Directive 2004/109/EC, Directive 2006/43/EC and Regulation (EU) No 537/2014, as regards corporate sustainability reporting. Available [here](#).

⁷⁴ Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 (Taxonomy Regulation). Available [here](#).

⁷⁵ Commission Regulation (EU) 2018/2026 of 19 December 2018 amending Annex IV to Regulation (EC) No 1221/2009 of the European Parliament and of the Council on the voluntary participation by organisations in a Community eco-management and audit scheme. Available [here](#).

⁷⁶ The Revised Annexes of the EMAS Regulation, 2018. Available [here](#)

⁷⁷ Commission Regulation (EU) 2017/1505 of 28 August 2017 amending Annexes I, II and III to Regulation (EC) No 1221/2009 of the European Parliament and of the Council on the voluntary participation by organisations in a Community eco-management and audit scheme. Available [here](#).

Global reporting frameworks

- BC155. The Kunming Declaration (October 2021) stresses, that urgent and integrated action is needed, for transformative change, across all sectors of the economy and all parts of society.
- BC156. GRI 3: “material topics” includes a requirement to describe actions taken to manage the topics identified as material and their related impacts.
- BC157. The CBD (1992) acknowledges “that the provision of new and additional financial resources and appropriate access to relevant technologies can be expected to make a substantial difference in the world's ability to address the loss of biological diversity” and acknowledges “that substantial investments are required to conserve biological diversity and that there is the expectation of a broad range of environmental, economic and social benefits from those investments”.
- BC158. Moreover, the CBD (1992) recommends integration “as far as possible and as appropriate, the conservation and sustainable use of biological diversity into relevant (...) plans, programmes and policies”.
- BC159. Target 19 of the post 2020 monitoring framework requires “Increase financial resources from all sources to at least 200 billion per year, including new, additional and effective financial resources, increasing by at least 10 billion per year international financial flows to developing countries, leveraging private finance, and increasing domestic resource mobilization, taking into account national biodiversity finance planning, and strengthen capacity building and technology transfer and scientific cooperation, to meet the needs for implementing the post-2020 global biodiversity framework implementation, commensurate with the ambition of the goals and targets of the framework.” And therefore to monitor “private expenditure on conservation and sustainable use of biodiversity and ecosystems”.
- BC160. The Science-based targets initiative for Nature⁷⁸ (2020) suggests classifying actions into three categories: avoid and reduce the pressures on nature loss (which would otherwise continue to grow), restore and regenerate so that the extent and integrity of nature can recover, transform underlying systems, at multiple levels, to address the drivers of nature loss.
- BC161. The “transform” category is important because according to the Science-based targets initiative for Nature⁷⁹, “the problems we face are system-wide, intertwined, and connected to a broad array of actors. This demands that companies explore system level collaboration and transformation (...) Companies that identify shared impacts and dependencies on nature can take collaborative, and more effective, action to address issues of shared interest (WWF & Proforest 2020)”.
- BC162. Moreover, the Science Based Target for Nature Initiative also notes that “the values, needs, and goals of local stakeholders, like government, citizens, and civil society, are crucial considerations for where and how to act, particularly because many types of action will require collaboration and multi-stakeholder effort” (2020, p.30).
- BC163. The Biodiversity Guidance of the Natural Capital Protocol⁸⁰ (p.63) suggest the following potential actions for organizations: biodiversity-informed procurement strategy, biodiversity certifications, support biodiversity restoration, disclosure of biodiversity assessment, invest in natural infrastructure.
- BC164. The mitigation hierarchy consists of four stages comprising a sequence of actions in order or priority: avoid biodiversity impacts during business operations, prevent adverse impacts, minimize any impacts where they cannot be immediately avoided, restore biodiversity that has been impacted at the site level, offset impacts in areas not affected by the project.

Users' needs

⁷⁸ <https://sciencebasedtargetsnetwork.org/resources/>

⁷⁹ <https://sciencebasedtargetsnetwork.org/resources/>

⁸⁰ https://capitalscoalition.org/guide_supplement/biodiversity-4/

- BC165. The objective is that stakeholders understand:
- (a) How actions and resources are linked to defined targets
 - (b) What topics are covered by actions, where, who are the parties involved, with what knowledge and over what time horizon.

Conclusions

- BC166. In order to ensure a sound understanding of the undertaking's actions and resources allocated for biodiversity and ecosystems and to be able to assess those actions' contribution to the targets identified by the undertaking, specific actions taken, their corresponding target and the resources allocated to that action shall be disclosed.
- BC167. All undertakings should report information on biodiversity and ecosystems action plans, key avoidance, minimisation and restoration or rehabilitation actions, biodiversity and ecosystems-related supply chain engagement, certifications, product and service development, incentives, customer engagement.
- BC168. The presentation of actions and resources will follow the different tables as specified, including a base year and milestones / target years to foster comparability as far as possible.

Choice of specific disclosures

Biodiversity and ecosystems action plans

- BC169. The [draft] standard includes the following Disclosure Requirement 11: "The undertaking shall describe its actions and actions plans and allocation of resources to meet its policy objectives and targets."
- BC170. Undertakings disclosing biodiversity and ecosystems action plans shall follow consistent rules to become more comparable. General information on action plans is provided in ESRS 5.
- BC171. List of key actions: For coherence and clarity, the description of key actions shall be linked to major dependencies, impacts, risks and opportunities disclosed in the "Impacts, Risks and Opportunities" section, and to targets identified in the "targets" section.
- BC172. Time horizon: The period during which each key action is intended to be implemented is another precision that demonstrates that actions are embedded into the business planning.
- BC173. Expected outcomes: The expected outcomes aim at clarifying how the undertaking intends to achieve its targets. This disclosure demonstrates the modelling effort performed by the undertaking and the seriousness of the roadmap. The expected outcomes may depend on many external factors and this forward-looking information is rather indicative. But with expected outcomes, the target is no longer a top-down decision for communication purposes, it becomes a strategic plan embedded into the business planning and operations.

Biodiversity and Ecosystems-related Performance Measures

EU legislation and recommendations

BC174. Article 19a (2) lit. (g) CSRD-proposal requires disclosure of all indicators relevant to the undertaking's business model, strategy, dependencies and resilience, risks and opportunities, governance, policies, targets, actions⁸¹.

BC175. Annex IV of the EMAS Regulation⁸² states that "the organisation must provide a summary of the data available on the environmental performance of the organisation with respect to its significant environmental aspects" and that "Where environmental objectives and targets exist, the respective data shall be reported";

Global reporting frameworks

BC176. The CBD (1992) requires in its article 7 to identify and monitor "through sampling and other techniques".

BC177. The Science Based Target for Nature Initiative suggest to monitor progress toward the undertaking's targets and report publicly on its progress. (2020, p.12)

BC178. The SFRD requires, related to land artificialisation, to report on the "Share of non-vegetated surface area (surfaces that have not been vegetated in ground, as well as on roofs, terraces and walls) compared to the total surface area of the plots of all assets".

BC179. The CBD has also noted that the ideal indicator for measuring progress should be (CBD, 2010) : "policy-relevant and meaningful, biodiversity relevant, scientifically sound, accepted by a broad public, lend itself to affordable monitoring and modelling, and be sensitive enough to detect changes in systems with in timeframes and on scales relevant to decision-making".

BC180. REQ-04 of the CDSB Framework requires companies to disclose quantitative and qualitative results to reflect significant sources of impacts, including reporting key indicators and metrics. According to the Application Guidance of Biodiversity Disclosures, when considering biodiversity, this should be expanded to include key indicators and metrics on:

- (a) Significant sources of biodiversity impact (i.e. impacts drivers);
- (b) Significant changes to the state of biodiversity (i.e. biodiversity impacts), including ecosystems, species and related ecosystem services (where relevant).

The selection of indicators/metrics included in the disclosure should be aligned with the targets set by the organisation.

Users' needs

BC181. In order to gain a thorough and sound understanding of an undertaking's relationship to biodiversity and ecosystems all stakeholders should have an understanding of biodiversity and ecosystems-related metrics to measure:

- (a) pressures (impact drivers);
- (b) impacts (equal to "states" for current impacts, whereas "impacts" are also forward-looking);
- (c) responses;
- (d) sustainable consumption and production;
- (e) financial exposure to physical and transition risks;

⁸¹ Proposal for a directive of the European Parliament and of the Council amending Directive 2013/34/EU, Directive 2004/109/EC, Directive 2006/43/EC and Regulation (EU) No 537/2014, as regards corporate sustainability reporting. Available [here](#).

⁸² The Revised Annexes of the EMAS Regulation, 2018. Available [here](#).

- (f) financial opportunities related to biodiversity and ecosystems other than the Taxonomy Regulation;
- (g) financing for biodiversity and ecosystems projects outside of the undertaking's value chain;

BC182. in such a way that an evaluation in terms of performance can be carried out by the users of the information (such as evolution over time, resource use efficiency, ability to meet targets, comparison with other companies ...).

Conclusions

BC183. Performance measures on Biodiversity and ecosystems have not reached a global consensus yet and the object of many ongoing collective work at the time of the drafting of this standard. That is why the Disclosure Requirements proposed in this [Draft] standard are mostly principles-based, so as to clarify the categories of performance measures expected, as well as laying out the features of quality biodiversity and ecosystems-related measures rather than proposing specific measures per say. Wherever possible, the application guidance refers to examples of commonly used metrics and tools in the public domain to allow application of the different categories of measures required under this Disclosure Requirement.

Choice of specific disclosures

Pressure metrics

BC184. The [draft] standard includes the following Disclosure Requirement 12: **“The undertaking shall report pressure metrics.”**

Impact metrics

BC185. The [draft] standard includes the following Disclosure Requirement 13: **“The undertaking shall report impact metrics for material geographical locations of sites and/or material raw materials.”**

Response metrics

BC186. The [draft] standard includes the following Disclosure Requirement 14: **“The undertaking shall disclose metrics related to how it minimizes and rehabilitates or restores material impacts on biodiversity and ecosystems in material geographical locations of sites and/or material raw materials identified.”**

Sustainable consumption and production metrics

BC187. The [draft] standard includes the following Disclosure Requirement 15: **“The undertaking may disclose metrics on its sustainable consumption and production.”**

Financial exposure to physical risks

BC188. The [draft] standard includes the following Disclosure Requirement 16: **“The undertaking shall disclose its financial exposure to physical risks.”**

Financial exposure to transition risks

BC189. The [draft] standard includes the following Disclosure Requirement 17: **“The undertaking shall disclose its financial exposure to transition risks.”**

Financial opportunities related to biodiversity and ecosystems other than the Taxonomy Regulation

BC190. The [draft] standard includes the following Disclosure Requirement 18: **“The undertaking may disclose its financial opportunities that relate to biodiversity and ecosystems and that complement the Taxonomy Regulation related ones.”**

Financing biodiversity and ecosystems mitigation projects outside of the undertaking's value chain

BC191. The [draft] standard includes the following Disclosure Requirement 19: **“The undertaking may disclose the financing of biodiversity and ecosystems mitigation projects outside its value chain.”**

Basis for conclusions: Appendix: References to major initiatives

Performance measure/Target	Initiative
Specific biodiversity and ecosystems-related disclosures for the implementation of ESRS 2 Strategy and business model	
DR.1 The undertaking shall disclose its plans to ensure that its business model and strategy are compatible with the transition to achieve no net loss by 2030 and net gain by 2050	Qualitative. Based on CDSB / Aligned with other ESRS when applicable.
DR.2 The undertaking shall disclose an assessment of the resilience of the current business model(s) and strategy to biodiversity and ecosystems-related physical and transition risks in light of a range of biodiversity and ecosystems-related scenarios.	Narrative. Based on TCFD / CDP/CDSB/CSRD Proposal /Capital Coalition / Aligned with other ESRS when applicable.
The disclosure required shall at least include: 1. whether the business model(s) has been verified by using a range of biodiversity and ecosystems-related scenarios; 2. an explanation on the choice of specific scenarios; 3. key assumptions made; 4. the scope of the resilience analysis, particularly the activities – in own operations and the value chain – and related principal transition and physical biodiversity and ecosystems-related risks covered; 5. the time horizon over which the analysis has been conducted; 6. the results of the resilience analysis.	Narrative. Based on TCFD / CDP/CDSB / CBD (Taxonomy) / Aligned with other ESRS when applicable.
The disclosure required may cover the short-, medium and long-term strategic implications resulting from the scenario analysis as well as the plans to ensure that the value chain strategy is compatible with global and EU objectives on biodiversity and ecosystems.	Narrative. Based on CDSB / CSRD Proposal / Aligned with other ESRS when applicable.
The information required shall cover: 1. how conclusions are drawn from the assessment of biodiversity and ecosystems-related scenarios and an explanation of the processes by which these outputs are validated; 2. how processes for identifying, assessing and managing impacts on biodiversity and ecosystems and on related risks are	Narrative. Based on CDSB / Capital Coalition / CBD (Taxonomy) Aligned with other ESRS when applicable.

integrated into the overall risk management, management system and strategy definition; 3. how the undertaking is working with suppliers to manage and mitigate risks for, and negative impacts on biodiversity and ecosystems; 4. the key barriers or challenges to avoiding biodiversity and ecosystems-related risks to the undertaking's own operations, as well as in other parts of its value chain; 5. by reference to Disclosure Requirements 16 and 17 of this standard, an assessment demonstrating how the undertaking's financial position and financial performance supports the resilience of its strategy and business model over the short, medium and long term.	
Specific biodiversity and ecosystems-related disclosures for the implementation of ESRS 3 Governance and organisation	
DR. 3 The undertaking may disclose whether and how internal biodiversity and ecosystems-related pricing schemes are applied to support its decision making.	Narrative/Quantitative. Aligned with other ESRS when applicable.
The disclosure required shall cover: 1. a description of whether and how the undertaking applies internal biodiversity and ecosystems-related pricing schemes; 2. the type of pricing scheme implemented; 3. the specific scope of application of the scheme (activities, geographies, entities, etc.); 4. the prices applied according to the type of scheme and critical assumptions; 5. the metrics covered by these schemes.	Narrative/Quantitative. Aligned with other ESRS when applicable.
DR.4 The undertaking shall disclose a description of how it engages in activities that could either directly or indirectly influence public policy on biodiversity and ecosystems.	Narrative. Based on UNGC new COP / CDP / CDSB / NFDR Guidelines / Aligned with other ESRS when applicable.
The information required shall include inter alia direct engagement with policy makers, trade associations, funding research organizations and a description of the processes the undertaking has in place to ensure that all of its direct and indirect activities seeking to influence policy are consistent with its biodiversity and ecosystems policies and targets	Narrative. Based on UNGC new COP / CDP / Aligned with other ESRS when applicable
The information required shall include a description of: 1. how it engages with stakeholders regarding biodiversity and ecosystems-related risks, opportunities, dependencies, and impacts, including engagement with upstream and downstream partners, as	Narrative. Based on UNGC new COP / NFDR Guidelines / Inspired from UNCC and CDP Forest / CDSB / Aligned with other ESRS when applicable

well as investor engagement, to promote good quality status of biodiversity and ecosystems as well as physical connection (e.g. green corridors) between ecosystems; 2. how it collaborates with biodiversity and ecosystems organisations or experts to understand emerging trends and good biodiversity and ecosystems management practices; 3. how it engages with local and indigenous communities, taking into consideration their perspective and concerns in the organisation's biodiversity and ecosystems management practices; 4. how it is involved in multi-stakeholder initiatives or partnerships aimed at improving the understanding of biodiversity and ecosystems, and/or at addressing dependencies and impacts to biodiversity and ecosystems.	
Specific biodiversity and ecosystem-related disclosures for the implementation of ESRS 4 Impacts, Risks and Opportunities	
DR. 5 The undertaking shall disclose how it has identified and assessed material: 1. biodiversity and ecosystem services dependencies and impacts, including the state of species, genes and ecosystems and; 2. drivers of biodiversity loss; by material geographical location of sites and/or by material raw material.	Narrative. Based on GRI/ Aligned with other ESRS when applicable
The disclosure required shall cover: 1. how the undertaking has identified and assessed the state of biodiversity and ecosystems that are impacted or on which it depends upon by material geographical sites and/or by material raw material; 2. how the undertaking has identified and assessed the material biodiversity loss drivers by upon by material geographical sites and/or by material raw material; 3. the process for identifying and assessing the dependencies and impacts on the state of biodiversity and ecosystem services and / or raw material including: 4. a description of how the context of biodiversity and ecosystem services related dependencies and impacts are taken into account (including geographical location, time frame, scope of assessment, severity of impact or significance of the loss of functionality, tools and methodologies used);	Narrative. Based on GRI/ Aligned with other ESRS when applicable

5. a description of how the process covers the undertaking's own operations as well as the rest of its value chain (supply chain, products and services, business partners).	
DR. 6 The undertaking shall disclose its material dependencies and impacts by categories and its material biodiversity loss drivers by geographical location of sites, and/or by raw material, within its operations and along its value chain.	Narrative. Based on IRIS+/ GRI/ Biodiversity and Business risk WEF / Aligned with other ESRS when applicable
The disclosure required shall cover: 1. the nature of material dependencies on natural resources and ecosystem services in own operations by material geographical site location; 2. the nature of material direct and indirect impacts on biodiversity and ecosystems in own operations by material geographical site location; 3. its material biodiversity loss drivers ecosystems in own operations by material geographical site location; 4. a description of the undertaking's knowledge of its suppliers' material biodiversity and ecosystems services-related dependencies, impacts and material biodiversity loss drivers, by material geographical location.	Narrative. Based on IRIS+/ GRI/ Biodiversity and Business risk WEF / Aligned with other ESRS when applicable
The disclosure required, if disclosed by raw material, shall cover: 1. the nature of material dependencies on natural resources and ecosystem services in own operations by material raw material produced, sourced or consumed; 2. the nature of material direct and indirect impacts on biodiversity and ecosystems in own operations by material raw material produced, sourced or consumed; 3. the nature of material biodiversity loss drivers in own operations by material raw material produced, sourced or consumed; 4. a description of the undertaking's knowledge of its suppliers' biodiversity and ecosystems services-related dependencies, impacts and material biodiversity loss drivers, by material raw material sourced	Narrative. Based on IRIS+/ GRI/ Biodiversity and Business risk WEF / Aligned with other ESRS when applicable
DR. 7 The undertaking shall disclose its processes to identify and assess its: 1. short-, medium- and long-term biodiversity and ecosystems-related physical risks and	Narrative. Based on IRIS+/ GRI/ Biodiversity and Business risk WEF / EMAS and Biodiversity

opportunities, in its operations and along the value chain; 2. short-, medium- and long-term biodiversity and ecosystems transition risks and opportunities, including policy, legal, technology, and market risks and opportunities, in its operations and along the value chain.	Guidelines / Aligned with other ESRS when applicable
The disclosure required shall cover: 1. a description of the processes to identify those physical and transition risks and opportunities that due to their importance for the undertaking are prioritised and monitored directly by the undertaking's highest governing bodies, including a definition of the considered time horizons, scenario analysis, how size and scale of the risks and opportunities are assessed; 2. a description of the processes to select material transition and physical risks and opportunities; 3. a description of how the process covers the undertaking's own operations as well as the rest of its value chain (supply chain, products and services, business partners).	Narrative. Based on IRIS+/ GRI/ Biodiversity and Business risk WEF / EMAS and Biodiversity Guidelines / Aligned with other ESRS when applicable
The undertaking may consider systemic risks within their assessment of biodiversity and ecosystems-related risks, referred to as the risk that a critical natural system no longer functions properly, the risk to financial institutions' portfolios and a risk to system-wide financial stability. In this case, a description of the processes to identify those risks is warranted.	Narrative. Based on IRIS+/ GRI/ Biodiversity and Business risk WEF / EMAS and Biodiversity Guidelines / Aligned with other ESRS when applicable
DR. 8 The undertaking shall disclose its principal biodiversity and ecosystems-related risks and opportunities by categories within its operations and along its value chain.	Narrative. Based on IRIS+/ GRI/ Biodiversity and Business risk WEF / EMAS and Biodiversity Guidelines / Aligned with other ESRS when applicable
The disclosure required shall cover: 1. physical risks, transition risks (regulatory, market, financial), other risks including reputational, financing and supply chain; 2. the undertaking's principal biodiversity and ecosystems opportunities by categories within the operations and along the value chain: transition opportunities (regulatory, market, financial), other opportunities including reputational, financing and supply chain.	Narrative. Based on IRIS+/ GRI/ Biodiversity and Business risk WEF / EMAS and Biodiversity Guidelines / Aligned with other ESRS when applicable

The undertaking may consider the disclosure of systemic risks identified.	Narrative. Based on IRIS+/ GRI/ Biodiversity and Business risk WEF / EMAS and Biodiversity Guidelines / Aligned with other ESRS when applicable
Specific biodiversity and ecosystem-related disclosures for the implementation of ESRS 5 Policies, Targets, Action Plans and Resources	
DR. 9 The undertaking shall disclose separately its policies regarding: 1. biodiversity and ecosystems; 2. the sustainable production, consumption and sourcing of raw materials; 3. screening and engaging with suppliers on biodiversity and ecosystems; 4. the social consequences of biodiversity and ecosystems related dependencies and impacts.	Narrative. Based on GRI Universal Standards / Aligned with other ESRS when applicable
The disclosure required on policies regarding biodiversity and ecosystems shall provide information on how the policy allows to: 1. avoid its negative impacts on biodiversity and ecosystems in its operations and throughout the value chain; 2. minimise its negative impacts on biodiversity and ecosystems in its operations and throughout the value chain that cannot be avoided; 3. rehabilitate degraded ecosystems or restore cleared ecosystems following exposure to impacts that cannot be completely avoided and/or minimised; 4. mitigate material biodiversity loss drivers as disclosed in the section dependencies, impacts, risks and opportunities;	Narrative. Based on CoP Questionnaire / GRI Universal Standards / EMAS /Aligned with other ESRS when applicable
The disclosure required on policies regarding the sustainable production, consumption and sourcing of raw materials shall provide information on how the policy allows to: 1. produce, source or consume with or from third-party certification; 2. ensure traceability of production, sourcing or consumption of raw materials; 3. produce, source or consume from ecosystems that have been managed to maintain or enhance conditions for biodiversity, as demonstrated by regular	Narrative. Based on CoP Questionnaire / GRI Universal Standards / EMAS /Nagoya Protocol /Aligned with other ESRS when applicable

monitoring and reporting of biodiversity levels and gains or losses.	
The disclosure required on policies regarding the social consequences of biodiversity and ecosystems related dependencies and impacts shall provide information on how the policy in relation to: 1. the fair and equitable benefit-sharing from the benefits arising from the utilisation of genetic resources; 2. the prior informed consent for access to genetic resources; 3. the prior informed consent or approval and involvement (of the communities) for access to traditional knowledge associated with genetic resources that is held by indigenous and local communities; 4. the protection of the rights of local and indigenous communities; notably recognising the close and traditional dependence of many indigenous and local communities embodying traditional lifestyles on biological resources, and the desirability of sharing equitably benefits arising from the use of traditional knowledge, innovations and practices relevant to the conservation of biological diversity and the sustainable use of its components.	Narrative. Based on CBD / Nagoya Protocol / Kunming Declaration / Aligned with other ESRS when applicable
DR. 10 The undertaking shall disclose its adopted, measurable, outcome-oriented biodiversity and ecosystem-related targets.	Quantitative/Narrative. Based on CDP / Global and EU Goals / ISO 14097 / SBTN / IUCN / CDP / Aligned with other ESRS when applicable
The disclosure required may include targets related to 1. material impacts on biodiversity and ecosystems; 2. material dependencies on biodiversity and ecosystems; 3. material biodiversity loss impact drivers; 4. material physical or transition risks.	Narrative. Based on CDP / Global and EU Goals / ISO 14097 / SBTN / IUCN / CDP / Aligned with other ESRS when applicable
The disclosure required on material impacts on biodiversity and ecosystems may include targets related to: 1. avoidance of biodiversity loss; 2. minimisation of biodiversity loss or; 3. rehabilitation or restoration of biodiversity loss.	Quantitative/Narrative. Based on CDP / Global and EU Goals / ISO 14097 / SBTN / IUCN / CDP / Aligned with other ESRS when applicable

The disclosure required on material impacts and dependencies on biodiversity and ecosystems may include targets related specifically to sustainable sourcing and consumption of raw materials such as targets related to: 1. avoidance of production, sourcing or consumption of raw materials of concern or at risk of extinction 2. minimisation of production, sourcing or consumption of raw materials of concern or at risk of extinction 3. absolute demand reduction for raw materials of concern or at risk of extinction 4. increasing certified sustainable production and/or procurement of raw materials of concern or at risk of extinction (per third party certification schemes for reported biodiversity-risk commodities, % of total production/ consumption certified); 5. increasing non-certified sustainable production and/or procurement of raw materials of concern or at risk of extinction (other than with a third-party certification scheme).	Quantitative/Narrative. Based on CDP / Global and EU Goals / ISO 14097 / SBTN / IUCN / CDP / Aligned with other ESRS when applicable
The targets disclosed shall include where applicable: 1. an explanation of what each target intends to achieve (e.g., land change reduction, full nature restoration, physical or transition risk mitigation, increase of CapEx or others) and how it is embedded in the undertaking's biodiversity and ecosystems-related policies; 2. the topical perimeter of the target: species specific, ecosystem specific; 3. whether the target is short-, medium- or long-term, where short-term relates to 1-5 years from the baseline year, medium-term to 5-10 years and long-term to 10 years and more, but no later than 2050; 4. a presentation preferably in 5-years periods including set dates in 2030, detailing the scope covered in absolute and/or intensity values; 5. how the targets respect ecological thresholds (e.g. the biosphere integrity & land-system change planetary boundaries^[1]) and allocate responsibility for respecting these thresholds to the organizational level; 6. whether the targets are informed by expectations in authoritative intergovernmental instruments such as the Convention for Biological Diversity (CBD) and, where relevant, by scientific consensus, that is, in the case of biodiversity and ecosystem services, the Intergovernmental Science-Policy Platform	Narrative. Based on CDP / Global and EU Goals / ISO 14097 / SBTN / IUCN / CDP / Aligned with other ESRS when applicable

on Biodiversity and Ecosystem Services (IPBES); 7. whether targets are mandatory (based on legislation) or voluntary. If they are mandatory, the undertaking shall list the relevant legislation;	
The undertaking shall state how its targets are connected with: 1. the EU Biodiversity Strategy for 2030, the EU Habitats directive; 2. national policy frameworks in relation to ecosystems and biodiversity.	Narrative. Based on Global and EU Goals / Aligned with other ESRS when applicable
The undertaking may state how its targets are connected with: 1. the SDGs 12, 14 and 15; 2. the Post-2020 Global Biodiversity framework; 3. any global convention related to biodiversity and ecosystems.	Narrative. Based on Global and EU Goals / Aligned with other ESRS when applicable
The undertaking may include other biodiversity and ecosystems-related targets the undertaking has adopted, such as targets related to safeguarding of ecosystem services, to provide an understanding of how the undertaking manages physical risks resulting from biodiversity or ecosystems loss or degradation and reduces its vulnerability to these risks.	Narrative. Aligned with other ESRS when applicable
DR. 11 The undertaking shall describe its actions and actions plans and allocation of resources to meet its policy objectives and targets.	Narrative. Based on IUCN / CDP / UNCC / ISO 14097 / EMAS / EU and global goals / SBTN / AICHI Targets / Aligned with other ESRS when applicable
The disclosure required shall cover action plans and resources related to own operations and value chain.	Narrative. Based on IUCN / CDP / UNCC / ISO 14097 / Aligned with other ESRS when applicable
The undertaking shall describe how it has incorporated traditional knowledge into biodiversity and ecosystems-related actions and actions plans.	Narrative. Based on IUCN / CDP / UNCC / Aligned with other ESRS when applicable
For each action plan or stand-alone action, the undertaking shall include the description of: 1. the geographical scope of the actions, including explanation of any limitations as to geographical boundaries or activities; 2. a list of the stakeholders involved in the stand-alone action or action plan and how they are involved, or/and a list of stakeholders impacted negatively or	Narrative. Based on IUCN / CDP / UNCC / ISO 14097 / Aligned with other ESRS when applicable

positively by the stand-alone action or action plan and how they are impacted; 3. actions categorised according to the mitigation strategy: avoid (conserve), minimize, restore/rehabilitate; 4. the material impact driver(s) each action or action plan aims to tackle; 5. related impacts or benefits created for local communities, smallholders, indigenous groups, women, the poor, marginalised and vulnerable groups and individuals; 6. an elaboration of the reason(s) why it selected such action over other possible actions; 7. an explanation whether the action is intended to be a one-time initiative or a systematic practice; 8. an explanation of changes in the action plan; 9. a brief assessment whether key actions may induce significant adverse sustainability impacts; 10. further explanations deemed useful to understand key actions; 11. if the action is individual or collective: for a collective action, the undertaking shall explain its role; 12. whether the success of the action depends on the undertaking of similar or supporting actions by other undertakings, and to what degree.	
The undertaking may describe the actions or actions plans to contribute to system-wide change, notably to alter the drivers of nature loss, e.g. through technological, economic, institutional, and social factors and changes in underlying values and behaviours.	Narrative. Based on SBTN / Aligned with other ESRS when applicable
Performance Measurement	
DR. 12 The undertaking shall report pressure metrics.	Quantitative/Narrative. Based on UNGC new COP/ Aligned with other ESRS when applicable
The information required shall cover pressure metrics that pertain to material impact drivers that unequivocally influence biodiversity, ecosystem services and underlying ecosystems. It shall include, but not be limited to, land-use or habitat change, climate change, pollution, natural resource use and exploitation, as well as invasive species.	Quantitative. Based on UNGC new COP/ Aligned with other ESRS when applicable

If land-use or habitat change has been assessed by the undertaking as a material impact driver of biodiversity and ecosystem services loss, the undertaking shall report pressure metrics that pertain to land-use or habitat change. Land-use or habitat change can include the conversion of land cover (e.g., deforestation or mining), changes in the management of the ecosystem or agro-ecosystem (e.g., through the intensification of agricultural management or forest harvesting) or changes in the spatial configuration of the landscape (e.g., fragmentation of habitats, changes in ecosystem connectivity). The undertaking shall disclose its share of non-vegetated surface area (surfaces that have not been vegetated in ground, as well as on roofs, terraces and walls) compared to the total surface area of the plots of all assets. This Disclosure Requirement supports the information needs of financial market participants subject to the Sustainable Finance Disclosure Regulation (EU) 2019/2088 (SFDR).	Quantitative. Based on UNGC new COP/ Aligned with other ESRS when applicable
If climate change has been assessed by the undertaking as a material impact driver of biodiversity and ecosystem services loss, the undertaking shall report pressure metrics that pertain to climate change, as laid out in ESRS E1.	Quantitative. Based on UNGC new COP/ Aligned with other ESRS when applicable
If pollution has been assessed by the undertaking as a material impact driver of biodiversity and ecosystem services loss, the undertaking shall report pressure that pertain to pollution, as laid out in ESRS E2, but not limited to sources of pollution covered in ESRS E2.	Quantitative. Based on UNGC new COP/ Aligned with other ESRS when applicable
If natural resource use and exploitation has been assessed by the undertaking as a material impact driver of biodiversity and ecosystem services loss, the undertaking shall report pressure metrics that pertain to natural resource use and exploitation as laid out in ESRS E3 for water use and ESRS E5 for natural resources use, but not limited to natural resources covered in ESRS E3 and E5.	Quantitative. Based on UNGC new COP/ Aligned with other ESRS when applicable
If invasive species has been assessed by the undertaking as a material impact driver of biodiversity and ecosystem services loss, the undertaking shall report pressure metrics that pertain to invasive species control and eradication.	Quantitative. Based on UNGC new COP/ Aligned with other ESRS when applicable
If the undertaking has identified any other material impact drivers of biodiversity and ecosystem services loss (in accordance with section Dependencies, Impacts, Risks and Opportunities), the undertaking shall report pressure metrics that pertain to those particular additional material impact drivers.	Quantitative. Based on UNGC new COP/ Aligned with other ESRS when applicable

DR. 13 The undertaking shall report impact metrics for material geographical locations of sites and/or material raw materials.	Quantitative/Narrative. Based on UNGC new COP/ Aligned with other ESRS when applicable
The information required shall include the assessment and reporting on the impact of their operations (owned, leased) and the impact of their value chain on species, ecosystems and ecosystem services and in particular: 1. when reporting on their impact on species, the undertaking shall consider three aspects – population size distinctiveness and extinction risk. These aspects provide insight on the health of a single species' population and its relative resilience to human induced and naturally occurring change; 2. when reporting on their impact on ecosystems, the undertaking shall consider four aspects: condition, extent, distinctiveness and functioning. Together they give insight into the overall health of an ecosystem.	Quantitative/Narrative. Based on UNGC new COP/ Aligned with other ESRS when applicable
DR. 14 The undertaking shall disclose metrics related to how it minimizes and rehabilitates or restores material impacts on biodiversity and ecosystems in material geographical locations of sites and/or material raw materials identified.	Quantitative. Based on IUCN / GRI / IRIS+ / Aligned with other ESRS when applicable
DR. 15 The undertaking may disclose metrics on its sustainable consumption and production.	Quantitative. Based on CDP / Aligned with other ESRS when applicable
The disclosure required shall include: 1. the list of any third-party certification schemes that it uses for its raw material, as well as the volume and percentage of its production and/or consumption covered; 2. the volume and percentage of supply of raw material traceable to mill or to plantation level; 3. the volume and percentage of raw material that comes from ecosystems that have been managed to maintain or enhance conditions for biodiversity, as demonstrated by regular monitoring and	Quantitative. Based on CDP / Aligned with other ESRS when applicable

reporting of biodiversity levels and gains or losses.	
[Taxonomy Regulation for biodiversity and ecosystems] The undertaking shall disclose information required by Article 8 of the Regulation (EU) 2020/852 (Taxonomy Regulation) in conjunction with the Commission Delegated Regulation (EU) 2021/2178 of 6 July 2021 and in conjunction with upcoming technical screening criteria for determining the conditions under which an economic activity qualifies as contributing substantially to the sustainable use and protection of biodiversity and ecosystems.	Quantitative. Based on EU Taxonomy / Aligned with other ESRS when applicable
DR. 16 The undertaking shall disclose its financial exposure to physical risks.	Quantitative. Aligned with other ESRS when applicable
The disclosure required shall provide information on how its principal biodiversity and ecosystems-related physical risks may affect its future performance, position and development in terms of: 1. amounts (monetary unit) of assets exposed to physical risks; 2. share (%) of turnover from its business activities exposed to physical risks.	Quantitative. Aligned with other ESRS when applicable
DR. 17 The undertaking shall disclose its financial exposure to transition risks.	Quantitative. Aligned with other ESRS when applicable
The disclosure required shall provide information on how its principal biodiversity and ecosystems-related transition risks may affect its: 1. future financial position in terms of: 1. assets (monetary unit) exposed to transition risks over the short, medium, and long-term; 2. liabilities (monetary unit) that may have to be recognised over the short, medium, and long-term; 2. future financial performance in terms of share (%) of turnover from its business activities exposed to transition risks.	Quantitative. Aligned with other ESRS when applicable
Optional DR. 18 The undertaking may disclose its financial opportunities that relate to biodiversity and ecosystems and that complement the Taxonomy Regulation related ones.	Narrative. Aligned with other ESRS when applicable

If the undertaking discloses this information, it shall include an assessment of the market size for low biodiversity and ecosystems impact products and services over the short-, medium-, and long-term, explaining how these are defined, how financial amounts are estimated, and which critical assumptions are made.	Narrative. Aligned with other ESRS when applicable
Optional DR. 19 The undertaking may disclose the financing of biodiversity and ecosystems mitigation projects outside its value chain.	Narrative/Quantitative. Aligned with other ESRS when applicable
The information disclosed shall include: 1. the total purchased biodiversity offsets; 2. the total sold biodiversity offsets; 3. a description of the type of offsets including the quality criteria applied and the standards that the biodiversity offsets fulfil.	Narrative/Quantitative. Aligned with other ESRS when applicable

Basis for conclusions: Appendix: Global and EU goals and targets

Global / international goals and targets					
Official name of text	Target or goal	Reference target for undertaking-level disclosures	Indicator (PTF own synthesis where necessary to shorten or not available at that level)	Time horizon	Source
Bonn Challenge	Bring 150 million hectares of deforested and degraded land into restoration by 2020 and 350 million hectares by 2030	350 million ha	Restoration of degraded and deforested landscapes	2030	The Bonn Challenge Bonchallenge
UNEP targets set out in the context of the UN Decade on Ecosystems Restoration	Save 1 million animal and plant species currently threatened with extinction	1 million animals and plant species	Extinction rate	2030	https://wedocs.unep.org/bitstream/handle/20.500.11822/30919/UNDecade.pdf?sequence=11
New York Declaration on Forests	At least halve the rate of loss of natural forests globally by 2020 and strive to end natural forest loss by 2030	Reduce to 0%	Reduce natural forests loss	2030	https://forestdeclaration.org/goals/goal-1
New York Declaration on Forests	Restore 150 million hectares of degraded landscapes and forestlands by 2020 and significantly increase the rate of global restoration thereafter, which would restore at least an additional 200 million hectares by 2030	350m ha	Rate of forest cover and tree cover gain (hectares established over time): Forest cover gain from FLR (ha)	2030	https://forestdeclaration.org/goals/goal-5
New York Declaration on Forests	Restore 150 million hectares of degraded landscapes and forestlands by 2020 and significantly increase the rate of global restoration thereafter, which would	350m ha	Rate of forest cover and tree cover gain (hectares established over time): Tree cover gain inside and	2030	https://forestdeclaration.org/goals/goal-5

	restore at least an additional 200 million hectares by 2030		outside the forest (ha)		
New York Declaration on Forests	Restore 150 million hectares of degraded landscapes and forestlands by 2020 and significantly increase the rate of global restoration thereafter, which would restore at least an additional 200 million hectares by 2030	350m ha	Forest landscape restoration efforts (political and socio-economic advancements towards): High-level pledges	2030	https://forestdeclaration.org/goals/goal-5
New York Declaration on Forests	Restore 150 million hectares of degraded landscapes and forestlands by 2020 and significantly increase the rate of global restoration thereafter, which would restore at least an additional 200 million hectares by 2030	350m ha	Forest landscape restoration efforts (political and socio-economic advancements towards): Planning and finance for FLR activities	2030	https://forestdeclaration.org/goals/goal-5
New York Declaration on Forests	Strengthen forest governance, transparency, and the rule of law, while also empowering communities and recognizing the rights of indigenous peoples, especially those pertaining to their lands and resources	Number of cases reported / litigation cases?	Illegal logging and land grabbing?	not specified	https://forestdeclaration.org/goals/goal-10
New York Declaration on Forests	Strengthen forest governance, transparency, and the rule of law, while also empowering communities and recognizing the rights of indigenous peoples, especially those pertaining to their lands and resources	Rights of indigenous peoples and local communities?	Empowering and ensuring the rights of indigenous peoples and local communities	not specified	https://forestdeclaration.org/goals/goal-10
CITES (the Convention on International Trade in Endangered)	Ensure that international trade in specimens of wild animals and plants does not threaten the survival of the species	Conservation status and projection?	Trade does not threaten species	ongoing	What is CITES?

Species of Wild Fauna and Flora)					
First draft of the post-2020 global biodiversity framework	Goal A The integrity of all ecosystems is enhanced, with an increase of at least 15 per cent in the area, connectivity and integrity of natural ecosystems, supporting healthy and resilient populations of all species, the rate of extinctions has been reduced at least tenfold, and the risk of species extinctions across all taxonomic and functional groups, is halved, and genetic diversity of wild and domesticated species is safeguarded, with at least 90 per cent of genetic diversity within all species maintained	15%	Extent of selected natural and modified ecosystems (i.e. forest, savannahs and grasslands, wetlands, mangroves, saltmarshes, coral reef, seagrass, macroalgae and intertidal habitats)	2050	https://www.cbd.int/conferences/post2020/wg2020-03/documents (CBD/WG 2020/3/3/ADD1)
First draft of the post-2020 global biodiversity framework	Goal A The integrity of all ecosystems is enhanced, with an increase of at least 15 per cent in the area, connectivity and integrity of natural ecosystems, supporting healthy and resilient populations of all species, the rate of extinctions has been reduced at least tenfold, and the risk of species extinctions across all taxonomic and functional groups, is halved, and genetic diversity of wild and domesticated species is safeguarded, with at least 90 per cent of genetic diversity within all species maintained	10x decrease	Extinction rate	2050	https://www.cbd.int/conferences/post2020/wg2020-03/documents (CBD/WG 2020/3/3/ADD1)

First draft of the post-2020 global biodiversity framework	Goal A The integrity of all ecosystems is enhanced, with an increase of at least 15 per cent in the area, connectivity and integrity of natural ecosystems, supporting healthy and resilient populations of all species, the rate of extinctions has been reduced at least tenfold, and the risk of species extinctions across all taxonomic and functional groups, is halved, and genetic diversity of wild and domesticated species is safeguarded, with at least 90 per cent of genetic diversity within all species maintained	90%	Genetic diversity within species	2050	https://www.cbd.int/conferences/post2020/wg2020-03/documents (CBD/WG 2020/3/3/ADD1)
First draft of the post-2020 global biodiversity framework	Goal A The integrity of all ecosystems is enhanced, with an increase of at least 15 per cent in the area, connectivity and integrity of natural ecosystems, supporting healthy and resilient populations of all species, the rate of extinctions has been reduced at least tenfold, and the risk of species extinctions across all taxonomic and functional groups, is halved, and genetic diversity of wild and domesticated species is safeguarded, with at least 90 per cent of genetic diversity within all species maintained	> 500	Proportion of populations within species with a genetically effective population size	2050	https://www.cbd.int/conferences/post2020/wg2020-03/documents (CBD/WG 2020/3/3/ADD1)

First draft of the post-2020 global biodiversity framework	Goal A The integrity of all ecosystems is enhanced, with an increase of at least 15 per cent in the area, connectivity and integrity of natural ecosystems, supporting healthy and resilient populations of all species, the rate of extinctions has been reduced at least tenfold, and the risk of species extinctions across all taxonomic and functional groups, is halved, and genetic diversity of wild and domesticated species is safeguarded, with at least 90 per cent of genetic diversity within all species maintained	At least 15% in the area	CMS connectivity indicator	2050	https://www.cbd.int/doc/c/437d/a239/12a22f2eaf5e6d103ed9adad/wg2020-03-inf-02-en.pdf
First draft of the post-2020 global biodiversity framework	Goal A The integrity of all ecosystems is enhanced, with an increase of at least 15 per cent in the area, connectivity and integrity of natural ecosystems, supporting healthy and resilient populations of all species, the rate of extinctions has been reduced at least tenfold, and the risk of species extinctions across all taxonomic and functional groups, is halved, and genetic diversity of wild and domesticated species is safeguarded, with at least 90 per cent of genetic diversity within all species maintained	At least 15% in the area	Ecosystem Integrity Index	2050	https://www.cbd.int/doc/c/437d/a239/12a22f2eaf5e6d103ed9adad/wg2020-03-inf-02-en.pdf

First draft of the post-2020 global biodiversity framework	Goal A The integrity of all ecosystems is enhanced, with an increase of at least 15 per cent in the area, connectivity and integrity of natural ecosystems, supporting healthy and resilient populations of all species, the rate of extinctions has been reduced at least tenfold, and the risk of species extinctions across all taxonomic and functional groups, is halved, and genetic diversity of wild and domesticated species is safeguarded, with at least 90 per cent of genetic diversity within all species maintained	At least 15% in the area	Species status information index (GEOBON)	2050	https://www.cbd.int/doc/c/437d/a239/12a22f2eaf5e6d103ed9adad/wg2020-03-inf-02-en.pdf
First draft of the post-2020 global biodiversity framework	Goal A The integrity of all ecosystems is enhanced, with an increase of at least 15 per cent in the area, connectivity and integrity of natural ecosystems, supporting healthy and resilient populations of all species, the rate of extinctions has been reduced at least tenfold, and the risk of species extinctions across all taxonomic and functional groups, is halved, and genetic diversity of wild and domesticated species is safeguarded, with at least 90 per cent of genetic diversity within all species maintained	At least 15% in the area	Proportion of populations maintained within species (GEOBON)	2050	https://www.cbd.int/doc/c/437d/a239/12a22f2eaf5e6d103ed9adad/wg2020-03-inf-02-en.pdf
First draft of the post-2020 global biodiversity framework	Milestone A.2 The increase in the extinction rate is halted or reversed, and the extinction risk is reduced by at least 10 per cent, with a decrease in the proportion of species that are threatened, and the abundance and distribution of populations of species is enhanced or at least maintained	Halted or reversed and reduced by least 10%	Extinction rate	2030	First draft of the post-2020 global biodiversity framework (cbd.int)

First draft of the post-2020 global biodiversity framework	Milestone A.3 Genetic diversity of wild and domesticated species is safeguarded, with an increase in the proportion of species that have at least 90 per cent of their genetic diversity maintained	At least 90%	Genetic diversity of wild and domesticated species maintained	2050	First draft of the post-2020 global biodiversity framework (cbd.int)
First draft of the post-2020 global biodiversity framework	Target 3. Ensure that at least 30 per cent globally of land areas and of sea areas, especially areas of particular importance for biodiversity and its contributions to people, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes	At least 30%	Coverage of Protected areas and OECMS (by effectiveness)	2030	https://www.cbd.int/conferences/post2020/wg2020-03/documents (CBD/WG 2020/3/3/ADD1)
First draft of the post-2020 global biodiversity framework	Target 3. Ensure that at least 30 per cent globally of land areas and of sea areas, especially areas of particular importance for biodiversity and its contributions to people, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes	At least 30%	Protected area coverage of key biodiversity areas	2030	https://www.cbd.int/doc/c/437d/a239/12a22f2eaf5e6d103ed9adad/wg2020-03-inf-02-en.pdf
First draft of the post-2020 global biodiversity framework	Target 3. Ensure that at least 30 per cent globally of land areas and of sea areas, especially areas of particular importance for biodiversity and its contributions to people, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and	At least 30%	Protected Area Management Effectiveness (PAME) (Protected Planet)	2030	https://www.cbd.int/doc/c/437d/a239/12a22f2eaf5e6d103ed9adad/wg2020-03-inf-02-en.pdf

	other effective area-based conservation measures, and integrated into the wider landscapes and seascapes				
First draft of the post-2020 global biodiversity framework	Target 3. Ensure that at least 30 per cent globally of land areas and of sea areas, especially areas of particular importance for biodiversity and its contributions to people, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes	At least 30%	Area under conservation management (Species Protection Index (GEOBON))	2030	https://www.cbd.int/doc/c/437d/a22f2eaf5e6d103ed9adad/wg2020-03-inf-02-en.pdf
First draft of the post-2020 global biodiversity framework	Target 4. Ensure active management actions to enable the recovery and conservation of species and the genetic diversity of wild and domesticated species, including through ex situ conservation, and effectively manage human-wildlife interactions to avoid or reduce human-wildlife conflict	Effectively manage	Proportion of species populations that are affected by human wildlife conflict	2030	https://www.cbd.int/conferences/post2020/wg2020-03/documents (CBD/WG2020/3/3/ADD1)
First draft of the post-2020 global biodiversity framework	Target 4. Ensure active management actions to enable the recovery and conservation of species and the genetic diversity of wild and domesticated species, including through ex situ conservation, and effectively manage human-wildlife interactions to avoid or	Recover, conserve	Number of plant genetic resources for food and agriculture secured in medium or long-term conservation facilities	2030	https://www.cbd.int/conferences/post2020/wg2020-03/documents (CBD/WG2020/3/3/ADD1)

	reduce human-wildlife conflict				
First draft of the post-2020 global biodiversity framework	Target 4. Ensure active management actions to enable the recovery and conservation of species and the genetic diversity of wild and domesticated species, including through ex situ conservation, and effectively manage human-wildlife interactions to avoid or reduce human-wildlife conflict	Recover, conserve	Green Status of Species Index (IUCN)	2030	https://www.cbd.int/doc/c/437d/a239/12a22f2eaf5e6d103ed9adad/wg2020-03-inf-02-en.pdf
First draft of the post-2020 global biodiversity framework	Target 5. Ensure that the harvesting, trade and use of wild species is sustainable, legal, and safe for human health	Ensure	Proportion of wildlife that is harvested legally and sustainably	2030	https://www.cbd.int/conferences/post2020/wg2020-03/documents (CBD/WG2020/3/3/ADD1)
First draft of the post-2020 global biodiversity framework	Target 5. Ensure that the harvesting, trade and use of wild species is sustainable, legal, and safe for human health	Ensure	Proportion of fish stocks within biologically sustainable levels	2030	https://www.cbd.int/conferences/post2020/wg2020-03/documents (CBD/WG2020/3/3/ADD1)
First draft of the post-2020 global biodiversity framework	Target 6. Manage pathways for the introduction of invasive alien species, preventing, or reducing their rate of introduction and establishment by at least 50 per cent, and control or eradicate invasive alien species to eliminate	Reduce by at least 50%	Rate of invasive alien species spread	2030	https://www.cbd.int/conferences/post2020/wg2020-03/documents (CBD/WG

	or reduce their impacts, focusing on priority species and priority sites				2020/3/3/ADD1)
First draft of the post-2020 global biodiversity framework	Target 6. Manage pathways for the introduction of invasive alien species, preventing, or reducing their rate of introduction and establishment by at least 50 per cent, and control or eradicate invasive alien species to eliminate or reduce their impacts, focusing on priority species and priority sites	Reduce by at least 50%	Rate of invasive alien species impact (GEOBON)	2030	https://www.cbd.int/doc/c/437d/a239/12a22f2eaf5e6d103ed9adad/wg2020-03-inf-02-en.pdf
First draft of the post-2020 global biodiversity framework	Target 9. Ensure benefits, including nutrition, food security, medicines, and livelihoods for people especially for the most vulnerable through sustainable management of wild terrestrial, freshwater and marine species and protecting customary sustainable use by indigenous peoples and local communities	Not defined	Ensure benefits to people through sustainable management of resources	2030	https://www.cbd.int/conferences/post2020/wg2020-03/documents (CBD/WG2020/3/3/ADD1)
First draft of the post-2020 global biodiversity framework	Target 9. Ensure benefits, including nutrition, food security, medicines, and livelihoods for people especially for the most vulnerable through sustainable management of wild terrestrial, freshwater and marine species and protecting customary sustainable use by indigenous peoples and local communities	Not defined	Ensure benefits to people through sustainable management of resources	2030	https://www.cbd.int/doc/c/437d/a239/12a22f2eaf5e6d103ed9adad/wg2020-03-inf-02-en.pdf

First draft of the post-2020 global biodiversity framework	Target 9. Ensure benefits, including nutrition, food security, medicines, and livelihoods for people especially for the most vulnerable through sustainable management of wild terrestrial, freshwater and marine species and protecting customary sustainable use by indigenous peoples and local communities	Not defined	Ensure benefits to people through sustainable management of resources	2030	https://www.cbd.int/doc/c/437d/a22f2eaf5e6d103ed9adad/wg2020-03-inf-02-en.pdf
First draft of the post-2020 global biodiversity framework	Target 9. Ensure benefits, including nutrition, food security, medicines, and livelihoods for people especially for the most vulnerable through sustainable management of wild terrestrial, freshwater and marine species and protecting customary sustainable use by indigenous peoples and local communities	Not defined	Ensure benefits to people through sustainable management of resources	2030	https://www.cbd.int/doc/c/437d/a22f2eaf5e6d103ed9adad/wg2020-03-inf-02-en.pdf
First draft of the post-2020 global biodiversity framework	Target 10. Ensure all areas under agriculture, aquaculture and forestry are managed sustainably, in particular through the conservation and sustainable use of biodiversity, increasing the productivity and resilience of these production systems	All	Area of forestry, agriculture and aquaculture under sustainable management	2030	https://www.cbd.int/conferences/post2020/wg2020-03/documents (CBD/WG 2020/3/3/ADD1)
First draft of the post-2020 global biodiversity framework	Target 13. Implement measures at global level and in all countries to facilitate access to genetic resources and to ensure the fair and equitable sharing of benefits arising from the use of genetic resources, and as relevant, of associated traditional knowledge, including through mutually agreed terms and prior and informed consent	Not defined	Facilitate access to genetic resources	2030	https://www.cbd.int/conferences/post2020/wg2020-03/documents (CBD/WG 2020/3/3/ADD1)

First draft of the post-2020 global biodiversity framework	Target 15. All businesses (public and private, large, medium and small) assess and report on their dependencies and impacts on biodiversity, from local to global, and progressively reduce negative impacts, by at least half and increase positive impacts, reducing biodiversity-related risks to businesses and moving towards the full sustainability of extraction and production practices, sourcing and supply chains, and use and disposal	All public and private, large to small	Business action - reporting on biodiversity impacts and dependencies	2030	https://www.cbd.int/conferences/post2020/wg2020-03/documents (CBD/WG 2020/3/3/ADD1)
First draft of the post-2020 global biodiversity framework	Target 15. All businesses (public and private, large, medium and small) assess and report on their dependencies and impacts on biodiversity, from local to global, and progressively reduce negative impacts, by at least half and increase positive impacts, reducing biodiversity-related risks to businesses and moving towards the full sustainability of extraction and production practices, sourcing and supply chains, and use and disposal	50%	Business action - decreasing negative impacts	2030	https://www.cbd.int/conferences/post2020/wg2020-03/documents (CBD/WG 2020/3/3/ADD1)
First draft of the post-2020 global biodiversity framework	Target 15. All businesses (public and private, large, medium and small) assess and report on their dependencies and impacts on biodiversity, from local to global, and progressively reduce negative impacts, by at least half and increase positive impacts, reducing biodiversity-related risks to businesses and moving towards the full sustainability of extraction and production practices, sourcing and supply chains, and use and disposal	Increase	Business action - increasing positive impacts	2030	https://www.cbd.int/conferences/post2020/wg2020-03/documents (CBD/WG 2020/3/3/ADD1)

	supply chains, and use and disposal				
First draft of the post-2020 global biodiversity framework	Target 15. All businesses (public and private, large, medium and small) assess and report on their dependencies and impacts on biodiversity, from local to global, and progressively reduce negative impacts, by at least half and increase positive impacts, reducing biodiversity-related risks to businesses and moving towards the full sustainability of extraction and production practices, sourcing and supply chains, and use and disposal	Reduce	Business action - reducing biodiversity-related business risk	2030	https://www.cbd.int/conferences/post2020/wg2020-03/documents (CBD/WG 2020/3/3/ ADD1)
First draft of the post-2020 global biodiversity framework	Target 15. All businesses (public and private, large, medium and small) assess and report on their dependencies and impacts on biodiversity, from local to global, and progressively reduce negative impacts, by at least half and increase positive impacts, reducing biodiversity-related risks to businesses and moving towards the full sustainability of extraction and production practices, sourcing and supply chains, and use and disposal	Full	Business action - sustainability of extraction, production, sourcing, supply chains, use, disposal	2030	https://www.cbd.int/conferences/post2020/wg2020-03/documents (CBD/WG 2020/3/3/ ADD1)

First draft of the post-2020 global biodiversity framework	Target 15. All businesses (public and private, large, medium and small) assess and report on their dependencies and impacts on biodiversity, from local to global, and progressively reduce negative impacts, by at least half and increase positive impacts, reducing biodiversity-related risks to businesses and moving towards the full sustainability of extraction and production practices, sourcing and supply chains, and use and disposal	All	Businesses (public and private, large, medium and small) assess and report on their dependencies and impacts on biodiversity, from local to global, and progressively reduce negative impacts, by at least half and increase positive impacts, reducing biodiversity-related risks to businesses and moving towards the full sustainability of extraction and production practices, sourcing and supply chains, and use and disposal	2030	https://www.cbd.int/doc/c/437d/a239/12a22f2eaf5e6d103ed9adad/wg2020-03-inf-02-en.pdf
First draft of the post-2020 global biodiversity framework	Target 18. Redirect, repurpose, reform or eliminate incentives harmful for biodiversity, in a just and equitable way, reducing them by at least US\$ 500 billion per year, including all of the most harmful subsidies, and ensure that incentives, including public and private economic and regulatory incentives, are either positive or neutral for biodiversity	At least USD 500 billion per year	Incentives for biodiversity - reduce harmful incentives	2030	https://www.cbd.int/conferences/post2020/wg2020-03/documents (CBD/WG2020/3/3/ADD1)
First draft of the post-2020 global biodiversity framework	Target 18. Redirect, repurpose, reform or eliminate incentives harmful for biodiversity, in a just and equitable way, reducing them by at least US\$ 500 billion per year, including all of the most harmful subsidies, and ensure that incentives, including public and private economic and	Not defined	Incentives for biodiversity - increase positive or neutral incentives	2030	

	regulatory incentives, are either positive or neutral for biodiversity				
First draft of the post-2020 global biodiversity framework	Target 20. Ensure that relevant knowledge, including the traditional knowledge, innovations and practices of indigenous peoples and local communities with their free, prior, and informed consent, guides decision-making for the effective management of biodiversity, enabling monitoring, and by promoting awareness, education and research	Not defined	Ensure that relevant knowledge, including the traditional knowledge, innovations and practices of indigenous peoples and local communities with their free, prior, and informed consent, guides decision-making for the effective management of biodiversity, enabling monitoring, and by promoting awareness, education and research	2030	https://www.cbd.int/conferences/post2020/wg2020-03/documents (CBD/WG 2020/3/3/ADD1)
First draft of the post-2020 global biodiversity framework	Target 21. Ensure equitable and effective participation in decision-making related to biodiversity by indigenous peoples and local communities, and respect their rights over lands, territories and resources, as well as by women and girls, and youth	Not defined	Ensure equitable and effective participation in decision-making related to biodiversity by indigenous peoples and local communities, and respect their rights over lands, territories and resources, as well as by women and girls, and youth.	2030	https://www.cbd.int/conferences/post2020/wg2020-03/documents (CBD/WG 2020/3/3/ADD1)

Transforming our world: the 2030 Agenda for Sustainable Development	Target 2.1: By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round	100%	Achieve food security (Food Insecurity Experience Scale)	2030	https://sdgs.un.org/goals/goal2
Transforming our world: the 2030 Agenda for Sustainable Development	Target 2.1: By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round	End	Hunger	2030	https://sdgs.un.org/goals/goal2
Transforming our world: the 2030 Agenda for Sustainable Development	Target 12.2: By 2030, achieve the sustainable management and efficient use of natural resources	Achieve	Sustainable management of resources	2030	https://sdgs.un.org/goals/goal12
Transforming our world: the 2030 Agenda for Sustainable Development	Target 12.2: By 2030, achieve the sustainable management and efficient use of natural resources	Achieve	Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP	2030	https://sdgs.un.org/goals/goal12
Transforming our world: the 2030 Agenda for Sustainable Development	Target 15.1: By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements	% of total land area	Total area of forested land	2020 / asap	https://sdgs.un.org/goals/goal15
Transforming our world: the 2030 Agenda for Sustainable Development	Target 15.1: By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests,	% by ecosystem type	Proportion of important sites covered by protected areas	2020 / asap	https://sdgs.un.org/goals/goal15

	wetlands, mountains and drylands, in line with obligations under international agreements				
Transforming our world: the 2030 Agenda for Sustainable Development	Target 15.3: By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world	% of land that is degraded over total land area	Land restoration, reforestation and afforestation	2030	https://sdgs.un.org/goals/goal15
Transforming our world: the 2030 Agenda for Sustainable Development	Target 15.4: By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development	% of coverage by protected areas	Mountain protection (Mountain Green Cover Index)	2030	https://sdgs.un.org/goals/goal15
Transforming our world: the 2030 Agenda for Sustainable Development	Target 15.4: By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development	% of coverage	Mountain protection (Mountain Green Cover Index)	2030	https://sdgs.un.org/goals/goal15
Transforming our world: the 2030 Agenda for Sustainable Development	Target 15.5: Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species	Halt	Biodiversity loss and extinction (based on Red List)	2020 asap /	https://sdgs.un.org/goals/goal15
Transforming our world: the 2030 Agenda for Sustainable Development	Target 15.7: Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products	Increase	Capacity of local communities to follow alternative livelihoods other than poaching	2020 asap /	https://sdgs.un.org/goals/goal15

Transforming our world: the 2030 Agenda for Sustainable Development	Target 15.7: Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products	% of traded wildlife that was poached or illicitly trafficked	Proportion of wildlife traded that is poached or illicitly trafficked	2020 / asap	https://sdgs.un.org/goals/goal15
Transforming our world: the 2030 Agenda for Sustainable Development	Target 15.8: By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species			2020 / asap	https://sdgs.un.org/goals/goal15
Aichi targets	Target 3. By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio economic conditions	0	Incentives, including subsidies, harmful to biodiversity	2020 / asap	https://www.cbd.int/sp/targets/
Aichi targets	Target 7. By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity	All	Areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity	2020 / asap	https://www.cbd.int/sp/targets/
Aichi targets	Target 9. By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment	Controlled or eradicated	Invasive alien species	2020 / asap	https://www.cbd.int/sp/targets/

Aichi targets	Target 12. By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained	Improve d	Conservation status of threatened species	2020 / asap	https://www.cbd.int/sp/targets/
Aichi targets	Target 18. By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels			2020 / asap	https://www.cbd.int/sp/targets/
Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention)	Target 4: Invasive alien species and pathways of introduction and expansion are identified and prioritized, priority invasive alien species are controlled or eradicated, and management responses are prepared and implemented to prevent their introduction and establishment			2024	4th strategic plan 2016 2024 e.pdf (ramsar.org)

EU goals and targets					
Official name of text	Target or goal	Reference target for undertaking-level disclosures	Indicator (PTF own synthesis where necessary to shorten or not available at that level)	Time horizon	Source

A Farm to Fork Strategy for a fair, healthy and environment ally-friendly food system (COM(2020) 381 final)	Ensuring food security, nutrition and public health – making sure that everyone has access to sufficient, nutritious, sustainable food that upholds high standards of safety and quality, plant health, and animal health and welfare, while meeting dietary needs and food preferences	Everyone has access	Food security, nutrition and public health	tbc	https://eur-lex.europa.eu/resource.html?uri=cellar:ea0f9f73-9ab2-11ea-9d2d-01aa75ed71a1.0001.02/DOC_1&format=PDF
Amsterdam Declaration Partnership	Promote sustainability in agriculture by eliminating deforestation in relation to agricultural commodities, and by working in partnership with consumer and producer countries and with all actors along the supply chains to this end	Hectares brought under restoration	Promote sustainability in agriculture	2025	Home - Amsterdam Declarations Partnership (ad-partnership.org)
Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora	Contribute towards ensuring biodiversity through the conservation of natural habitats and of wild fauna and flora in the European territory of the Member States	Contribute	Ensuring biodiversity through the conservation of natural habitats and of wild fauna and flora	ongoing	https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31992L0043&from=EN
Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora	Measures taken pursuant to this Directive shall be designed to maintain or restore, at favourable conservation status, natural habitats and species of wild fauna and flora of Community interest	Maintained or restored to favourable status	Natural habitats and species of wild fauna and flora of Community interest	ongoing	https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31992L0043&from=EN

Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora	A coherent European ecological network of special areas of conservation shall be set up under the title Natura 2000. This network, composed of sites hosting the natural habitat types listed in Annex I and habitats of the species listed in Annex II, shall enable the natural habitat types and the species' habitats concerned to be maintained or, where appropriate, restored at a favourable conservation status	Maintained or restored at a favourable conservation status	Coherent European ecological network of special areas of conservation under the title Natura 2000	ongoing	https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31992L0043&from=EN
Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora	Where they consider it necessary, Member States shall endeavour to improve the ecological coherence of Natura 2000 by maintaining, and where appropriate developing, features of the landscape which are of major importance for wild fauna and flora, as referred to in Article 10			ongoing	https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31992L0043&from=EN
Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora	Member States shall endeavour, where they consider it necessary, in their land-use planning and development policies and, in particular, with a view to improving the ecological coherence of the Natura 2000 network, to encourage the management of features of the landscape which are of major importance for wild fauna and flora			ongoing	https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31992L0043&from=EN
EU Biodiversity strategy - COM/2020/380 final	No deterioration in conservation trends and status of all protected habitats and species by 2030. In addition, Member States will have to ensure that at least 30% of species and habitats not currently in favourable status are in that category or show a strong positive trend	30% habitats and species reach favourable conservation status	Degraded or carbon-rich ecosystems are restored, habitats and species show no deterioration	2030	https://eur-lex.europa.eu/resource.html?uri=cellar:a3c806a6-9ab3-11ea-9d2d-01aa75ed71a1.000

					1.02/DOC_1&format=PDF
EU Biodiversity strategy - COM/2020/380 final	Strictly protect at least a third of the EU's protected areas, including all remaining EU primary and old-growth forests	100%	Strict protection of EU primary and old-growth forests	2030	https://eur-lex.europa.eu/resource.html?uri=cellar:a3c806a6-9ab3-11ea-9d2d-01aa75ed71a1.0001.02/DOC_1&format=PDF
EU Biodiversity strategy - COM/2020/380 final	Decline in pollinators is reversed	0% decline	Decline in pollinators is reversed	2030	https://eur-lex.europa.eu/resource.html?uri=cellar:a3c806a6-9ab3-11ea-9d2d-01aa75ed71a1.0001.02/DOC_1&format=PDF
EU Biodiversity strategy - COM/2020/380 final	At least 30% of the land and 30% of the sea are protected in the EU; This is a minimum of an extra 4% for land and 19% for sea areas as compared to today, and ecological corridors, as part of a true Trans-European Nature Network, are integrated	At least 30%	Protected, connected areas	2030	https://eur-lex.europa.eu/resource.html?uri=cellar:a3c806a6-9ab3-11ea-9d2d-01aa75ed71a1.0001.02/DOC_1&format=PDF

EU Biodiversity strategy - COM/2020/380 final	Bring back at least 10% of agricultural area under high-diversity landscape features. These include, inter alia, buffer strips, rotational or non-rotational fallow land, hedges, non-productive trees, terrace walls, and ponds. These help enhance carbon sequestration, prevent soil erosion and depletion, filter air and water, and support climate adaptation	At least 10%	Agricultural land is under high diversity landscape features	2030	https://eur-lex.europa.eu/resource.html?uri=cellar:a3c806a6-9ab3-11ea-9d2d-01aa75ed71a1.0001.02/DOC_1&format=PDF
EU Biodiversity strategy - COM/2020/380 final	At least 25% of the EU's agricultural land must be organically farmed by 2030	At least 25%	Agricultural land under organic farming management	2030	https://eur-lex.europa.eu/resource.html?uri=cellar:a3c806a6-9ab3-11ea-9d2d-01aa75ed71a1.0001.02/DOC_1&format=PDF
EU Biodiversity strategy - COM/2020/380 final	Protect soil fertility, reduce soil erosion and increase soil organic matter	Significant increase	Uptake of agro-ecological practices is significantly increased	2030	https://eur-lex.europa.eu/resource.html?uri=cellar:a3c806a6-9ab3-11ea-9d2d-01aa75ed71a1.0001.02/DOC_1&format=PDF
EU Biodiversity strategy - COM/2020/380 final	Stop the loss of green urban ecosystems. The promotion of healthy ecosystems, green infrastructure and nature-based solutions should be systematically integrated into urban planning, including in public spaces, infrastructure, and the	0	Chemical pesticides used in EU urban green areas	2030	https://eur-lex.europa.eu/resource.html?uri=cellar:a3c806a6-9ab3-11ea-9d2d-01aa75ed71a1.0001.02/DOC_1&format=PDF

	design of buildings and their surroundings				1.02/DOC1&format=PDF
EU Biodiversity strategy - COM/2020/380 final	Planting at least 3 billion additional trees in the EU by 2030, in full respect of ecological principles	3 billion	Number of new trees planted in EU	2030	https://eur-lex.europa.eu/resource.html?uri=cellar:a3c806a6-9ab3-11ea-9d2d-01aa75ed71a1.0001.02/DOC1&format=PDF
EU Biodiversity strategy - COM/2020/380 final	Minimise, and where possible eliminate, the introduction and establishment of alien species in the EU environment. The aim will be to manage established invasive alien species and decrease the number of Red List species they threaten by 50%	Reduce by 50%	Reducing number of Red list species threatened by invasive alien species	2030	https://eur-lex.europa.eu/resource.html?uri=cellar:a3c806a6-9ab3-11ea-9d2d-01aa75ed71a1.0001.02/DOC1&format=PDF
EU Biodiversity strategy - COM/2020/380 final	Achieve more sustainable agriculture and forestry	Achieve more	Sustainable agriculture and forestry	2020 / asap	https://www.eea.europa.eu/soer/2020
EU Biodiversity strategy - COM/2020/380 final	Effectively manage all protected areas, defining clear conservation objectives and measures, and monitoring them appropriately.	Clear conservation objectives and measures defined	Effective management and monitoring	2030	https://eur-lex.europa.eu/resource.html?uri=cellar:a3c806a6-9ab3-11ea-9d2d-01aa75ed71a1.0001.02/DOC1&format=PDF

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EU Pollinators Initiative (COM(2018) 395 final)	Tackling the causes of pollinator decline	Conserve, improve, reduce	Conservation of endangered pollinator species and habitats Improvement of pollinator habitats on and around farmland Improvement of pollinator habitats in urban areas and the wider landscape Reduction of the impacts if pesticide use on pollinators Reduction of the impacts of invasive alien species on pollinators	ongoing	https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018DC0395&from=EN
EU Pollinators Initiative (COM(2018) 395 final)	Improve knowledge of pollinator decline, its causes and consequences; tackle the causes of pollinator decline; raise awareness, engage society at large and promote collaboration	Improve	Knowledge of pollinator decline	2020 / asap	https://www.eea.europa.eu/soer/2020
EU Soil strategy	Increase soil organic matter and restore carbon-rich ecosystems	Increase (soil) and restore (ecosystems)	Soil organic matter and carbon-rich ecosystems	2030	Healthy soils – new EU soil strategy (europa.eu)
EU Soil strategy	Achieve land degradation neutrality by 2030	Reduce negative impacts	Negative impacts on sensitive species and habitats, including seabed is reduced	2030	Healthy soils – new EU soil strategy (europa.eu)

Green infrastructure — Enhancing Europe's natural capital (GI strategy)	Integrate green infrastructure (GI) into key policy areas, improving the knowledge base and encouraging innovation in relation to GI, improving access to finance including supporting EU-level GI projects.			2020 / asap	https://www.eea.europa.eu/soer/2020
Proposal for a regulation on deforestation-free products (COM(2021) 706 final)	Curb deforestation and forest degradation provoked by EU consumption and production. Minimize consumption of products coming from supply chains associated with deforestation or forest degradation – and increase EU demand for and trade in legal and 'deforestation free' commodities and products.	Curb	Deforestation and forest degradation provoked by EU consumption and production	2030	Proposal for a regulation on deforestation-free products (europa.eu)
Proposal for a regulation on deforestation-free products (COM(2021) 706 final)	Curb deforestation and forest degradation provoked by EU consumption and production. Minimize consumption of products coming from supply chains associated with deforestation or forest degradation – and increase EU demand for and trade in legal and 'deforestation free' commodities and products.	Minimize	Consumption of products coming from supply chains associated with deforestation or forest degradation	2030	Proposal for a regulation on deforestation-free products (europa.eu)
Proposal for a regulation on deforestation-free products (COM(2021) 706 final)	Curb deforestation and forest degradation provoked by EU consumption and production. Minimize consumption of products coming from supply chains associated with deforestation or forest degradation – and increase EU demand for and trade in legal and 'deforestation free' commodities and products.	Increase	EU demand for and trade in legal and 'deforestation free' commodities and products	2030	Proposal for a regulation on deforestation-free products (europa.eu)

Regulation on invasive alien species; EU biodiversity strategy to 2020, Targets 4, 5 and 6; 7th EAP	Combat invasive alien species	Combat	Invasive alien species	2020 asap	/ https://www.eea.europa.eu/soer/2020
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WORKING PAPER